Public Utilities

FORTNIGHTLY

May 27, 1937

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

How to make June Bride Mon
increase your load

Electric Table Model, a $5.75 value for a limited time at $4.95.

Here is your opportunity to make the gift buying son increase your load! During June Silex is feat the Brides' Special Models: The Electric Table M a $5.75 value for $4.95 . . . The Everyday Ki Model, a $3.25 value for $2.95!

With its 550-watt rating . . . with its constant u homes . . . with its popularity sweeping the natio coupled with this amazing offer . . . Silex is your load builder among table appliances!

To back up this offer . . . Silex is running spe American Weekly on May 16, May 30, June 13, 27 . . . and in This Week on May 23, June 6, and 20! This advertising, with a combined circulati 10,095,397, reaches an average of 1 out of 3 fa in the United States!

In addition . . . Silex is running a full page four advertisement in the May issue of House Beautifu backed up by full page reproductions in Elec Merchandising, Electrical Dealer, and upon the cover of House Furnishing Review.

Write today for a plan to level out your su slump and increase your load throughout the ye

THE SILEX COMPANY
Dept. 527
Hartford, Connecticut

Genuine SILEX GLASS COFFEE
TRADE MARK REGISTERED U.S. PAT. OF

Silex glass coffee makers are made in both ga electric models. All Silex glass coffee makers Pyrex brand glass, guaranteed against heat bre

BREWING COMPLETED WITHOUT REMOVING GLASS FROM ST

STOLEN

Many Valuable Hours and Hundreds of Dollars from Utility Operators

Just as though a gang of eves entered your garage—stopped your trucks on the d—and stole your tires—ewall breaks in truck tires e a terrific toll of time and ney.

The sidewalls represent the ilure Zone." It is here, en- neers discovered, that eight of ten premature failures cur. Often tires must be en out of service thousands miles before their time be- use they fail in the sidewall g before the tread is worn.

Triple Protection Brings Big Savings

Sidewall failures seldom occur in Goodrich Silvertowns because these tires are *triple protected*. Statistics show that *Triple Protection* checks 80% of all premature failures. It not only gives your tires this extra protection but it prevents a big cause of blow-outs and at the same time cuts down road delays.

How Triple Protection Works

1. PLYFLEX — distributes stresses throughout the tire —prevents ply separation —checks local weakness.
2. PLY-LOCK—protects the tire from breaks caused by short plies tearing loose above the bead.
3. 100% FULL-FLOATING CORD—eliminates cross cords from *all* plies—reduces heat in the tire 12%.

Costs No More

Here's the amazing part about this amazing tire. Although it costs us more to make it costs you not one cent more than other quality tires.

Why not get acquainted with these new Goodrich Tires now? There are over a hundred types and sizes. But there's one type—one size—that will help stop waste in your fleet.

The local Goodrich dealer can find that particular tire with "The Truck Tire Calculator," a scientific device which selects the proper tire combinations, gives actual costs for the life of the tire and shows you how much you can save.

Call the Goodrich dealer for further details or write direct to The B. F. Goodrich Company, Akron, Ohio.

Goodrich *Triple Protected* **Silvertowns**

SPECIFY THESE NEW SILVERTOWN TIRES FOR TRUCKS AND BUSES

Editor—HENRY C. SPURR
Associate Editors—ELLSWORTH NICHOLS, FRANCIS X. WELCH
Contributing Editor—OWEN ELY

Public Utilities Fortnightly

VOLUME XIX — *May 27, 1937* — NUMBER 11

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

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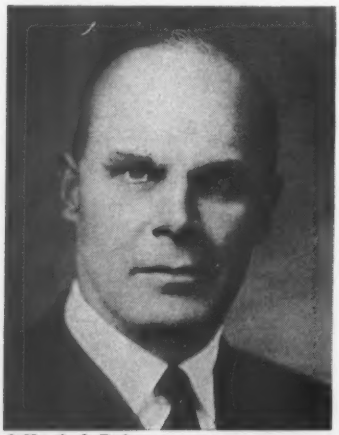
Pages with the Editors

THE Depression is over but the Emergency lingers on. The fiscal years come and go and the Secretary of the Treasury continues with his double bookkeeping to provide a pleasant façade to house Federal budget operations. Government finance still has much need of a twin inkpot, for it would seem that red is red and black is black and ne'er the twain shall meet.

WHITHER, as the high school orator would exclaim, are we drifting? What are we going to do when the next depression, now variously predicted by our economic Cassandras as happening sometime between 1941 and 1950 (subject to change without notice), requires another enormous opening of the Federal pocketbook in the name of humanity, or something.

WILL our then President sternly shake his finger in the face of Time and say, "You can't have another depression; you haven't finished paying for the last one." Or will we emulate the example of Britain, which is still paying interest on her Napoleonic War debt, and wrap up periodical parcels of our national debt into convenient bundles of "Consols" and issue more government securities against them? Will we have the intriguing spectacle of U. S. Bonds—1933 Depression Series, and U. S. Bonds—1940 Depression Series for an unborn generation to buy, sell, and traffic in?



© Harris & Ewing

CHARLES W. KELLOGG

What is the electrical industry's situation today?

(SEE PAGE 659)

Blackstone Studios

LUTHER R. NASH

Accounting takes the spotlight in new regulatory practice.

(SEE PAGE 665)

IT would be very nice if we could arrange to have our grandchildren finance our present depression. After all, as Edmund Burke once said, what has posterity ever done for us that we should do anything for posterity? Unfortunately, however, the economic creditors of our government may not wait for the little darlings to grow up into taxpayers, and so it happens that lately we are hearing strange cries from Washington that sound very much like the cry of "Economy." True, we've heard noises like this before and found out that the President was only teasing nervous Congressmen. But this time it sounds serious.

OF course, there is the possibility that Congress may be driven to levy enough taxes to keep our Emergency going along in the style to which it has become accustomed. Time and again, Administration spokesmen have pointed to England where taxpayers are cheerfully (?) kicking in as much as 25 per cent of their income for Rule Brittania. Doubtless some of the New Dealers hope for the day when America can enjoy such a happy state of affairs. But there again, we would probably have to grow another and much more docile generation of taxpayers. The present breed is more likely to use an ax on the nearest Congressman and does the Congressman know it!

THIS is the dilemma in which the Administration finds itself just at the time when government project planners were busy with plans to blanket the country with dams, dikes, and ditches. A Washington observer put the whole situation in a nutshell some weeks ago by stating, "One formidable barrier now rises to block the general advance of public ownership just at a time when purely legal barriers show signs of giving way; that is, the precarious state of the national finances."

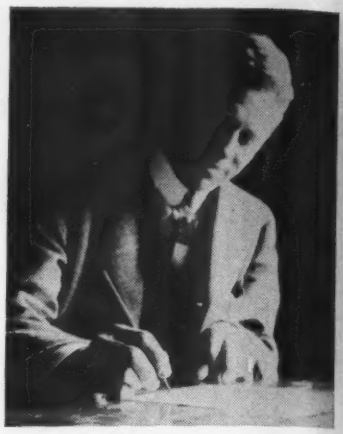
THIS brings to mind the situation of the privately owned power industry of the United States. What is its present situation—in a nutshell? Such is the subject of the leading article in this issue by CHARLES W. KELLOGG, president of the Edison Electric Institute (starting page 659). Giving a detailed biographical sketch of MR. KELLOGG'S career in the power industry would only be a work of supererogation for the readers of the FORTNIGHTLY. Suffice it here to say that this distinguished alumnus of Massachusetts Institute of Technology ('03) practically grew up with the Stone & Webster organization and since 1934 has been chairman of the Board of Engineers Public Service Company. Not only is he master of all three branches of the utility business: operating, finance, and engineering, but he has during the last few years emerged as one of the leading, effective and respected spokesmen for the industry as a whole A. F. T. C. (after the Federal Trade Commission).

ANOTHER leading light in modern electric industrial history is LUTHER R. NASH, also

HOWARD F. WEEKS

There's more to the utility business than rate arguments.

(SEE PAGE 682)



FRANK M. PATTERSON

Floods are costly but how expensive is the cure?

(SEE PAGE 675)

prominently identified with the Stone & Webster organization, whose article on recent accounting practices begins on page 665. To extend the coincidence, it will be recalled that MR. NASH likewise is an alumnus of Massachusetts Institute of Technology. He later received a S.M. from Harvard, and is at present vice president of Stone & Webster Engineering Corporation in charge of appraisals.

HOWARD F. WEEKS, whose article on utility service begins on page 682, is connected with another utility organization—the Consolidated Edison Company of New York of which he is assistant publicity director. MR. WEEKS' background runs more along editorial lines. Following his attendance at Brown University he spent some time in the journalistic profession and then joined the staff of the American Gas Association in 1926, becoming editor of the *AGA Monthly*. He became associated with his present company in 1929.

MR. FRANK M. PATTERSON, whose second article on engineering aspects of TVA operation begins on page 675, is a noted consulting engineer of Chicago. An alumnus of the University of Iowa, MR. PATTERSON entered the valuation bureau of the ICC in 1914 after engineering experience with the C. B. & Q. Railroad Company. In 1925 he left government service to take up private practice in Chicago.

The next number of this magazine will be out June 10th.

The Editors

In This Issue

In Feature Articles

In Financial News

In What Others Think

In The March of Events

In The Latest Utility Rulings

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

JOHN DUNNIGAN
New York State Senator.

"I have always been an advocate of lower utility rates."

THOMAS F. WOODLOCK
Former ICC member.

"To 'pack' or to 'unpack' a court is necessarily a mortal blow at its independence."

BURTON K. WHEELER
U. S. Senator from Montana.

"Why does the administration still cry for the gray-haired scalps of those nine old men?"

JOHN E. RANKIN
U. S. Representative from Mississippi.

"We have enough people on the payroll in Washington, it seems to me, to answer all purposes."

EDITORIAL OBSERVATION
Portland Oregonian.

"A sea monster has been chasing herring fishermen at Eastport, Maine, they say. It wouldn't be the Quoddy project, as this one moves."

MME. ODETTE KEUN
French writer.

"It is not while the Tennessee Valley Authority has the valley in its keeping that despair or disintegration can prepare the ground for a dictatorship and the loss of freedom."

MALCOLM PIRNIE
New York consulting geologist.

"Inasmuch as the limestone strata water of south Florida already is salted from ocean seepage, it could not conceivably be injured by the canal cut several hundred miles to the north."

JAMES THURBER
Popular writer.

"The (leftist) critics themselves believe, of course, in the education of the worker, but they are divided into two schools about it: those who believe the worker should be taught beforehand why there must be a revolution, and those who believe that he should be taught afterward why there was one."

HUGH S. MAGILL
Editor, Investor America.

"Whenever the wealth of a nation has been socialized even in part, it is only one more step to a dictatorship in which one man, supported by military force, and having at his disposal the power inherent in the wealth that he then controls, autocratically dominates the nation and ruthlessly tramples on all human rights."

FIORELLO H. LA GUARDIA
Mayor of New York city.

"I have some monuments that I can point to that I took part in obtaining for the people of this country in getting control of natural resources and cheap rates."

E. D. RIVERS
Governor of Georgia.

"Instead of having to pay a higher (railroad) rate the South, which is fighting an uphill battle industrially, ought to be given the benefit of any discriminations."

ARTHUR E. MORGAN
Chairman, Tennessee Valley Authority.

"It is my opinion that America has not yet developed methods and policies which would justify settling permanently upon a policy with reference to ownership and operation of electric power facilities."

DAVID LAWRENCE
Newspaper columnist.

"The Supreme Court justices thus far have saved the Constitution by declining to permit a majority of both houses of Congress to amend the Constitution. These justices have stood firmly for the right of the people to amend the Constitution in their own way."

FRANKLIN D. ROOSEVELT
President of the United States

"But I defy anyone to read the opinions in the TVA case, the Duke power case, and the AAA case and tell us exactly what we can do as a national government in this session of the Congress to control flood and drought and generate cheap power with any reasonable certainty that what we do will not be nullified as unconstitutional."

MICHAEL H. CARMODY
Supreme Knight, Knights of Columbus.

"By their philosophy of hate and absolutism our radicals would destroy initiative and penalize ability, disorganize labor and industry, discourage thrift and frugality, despoil the sanctity of the home and family, discredit man's ability to direct his own affairs, and would in the end regiment him into bondage under a dictatorship."

CHARLES W. KELLOGG
President, Edison Electric Institute.

"At the present time unemployment is still our greatest national problem, and the labor required to operate a water-power plant, once constructed, is very small, while with a steam plant not only is more labor required to operate the same size plant, but an even greater amount of labor is required to mine the coal which would be burned therein to produce electric energy."

MRS. J. BORDEN-HARRIMAN
U. S. Minister to Norway.

"President Roosevelt, ardent friend and inspired leader of the masses, has determined upon a plan of reorganization of the Federal judiciary which, when put into effect, will permit appointment to the highest court of additional justices, not only able constitutional lawyers but men whose hearts beat close to the common people, and who are in sympathy with their desires and vital needs."

The sale of Modern Lighting for Modern Store Fronts should *begin at Home!*

Here's how Architect Geo. F. Sansbury and the Potomac Edison Company convince the merchants and property owners of Cumberland, Md., of the value of brightly lighted stores.

A modern store front demands modern illumination. And modern illumination means a heavier lighting load. There's a natural tie-up if there ever was one . . . new Pittco Store Fronts and modern lighting.

But to take best advantage of this tie-up . . . to convince prospects in your community of the soundness of store front modernization with better lighting . . . there's nothing more valuable than an actual example . . . on your own show rooms . . . of just what you mean.

You talk to a merchant . . . tell him the need for modern merchandising methods . . . plug away on the idea of a new store front with better lighting. And to clinch the argument, you say "Look at our own quarters down the street. There's a new front . . . illuminated in the modern manner. We practice what we preach . . . because we know it means better business!"

Put a new Pittco Front on your utility show rooms. Make them an example of what you preach. And when the Pittco Store Front Caravan, sponsored by Pittsburgh Plate Glass Company, comes to your territory, don't miss it. It shows you numerous actual examples of modern store front lighting. It offers you an opportunity to cooperate with a promotional effort that leads directly to more business for you. Contact our local branch for data about the Caravan . . . and for any cooperation on store fronts you may need in your work.

Pittco PITTSBURGH Glass
PLATE GLASS COMPANY

TITAN

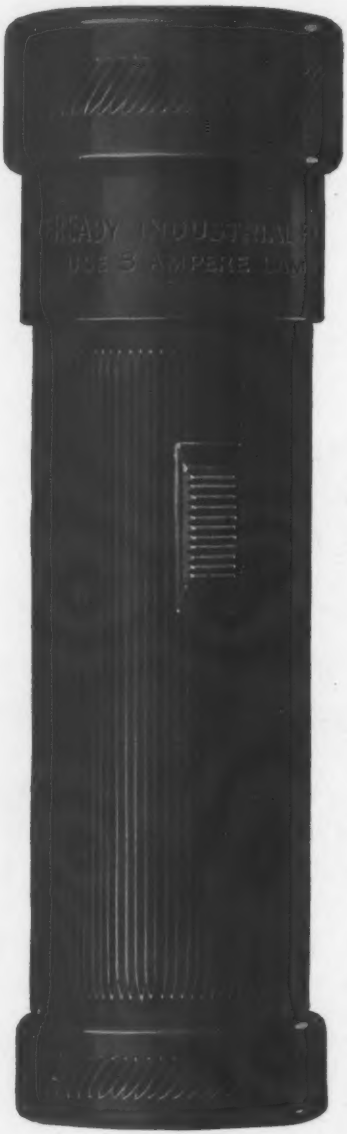
SNAP ACTION THERMOSTATS

To specify a Titan Snap Action Thermostat is to specify a device tested by wide field experience . . . proven by years of use under the most severe conditions with all types of gas from Canada to the Canal Zone . . . extraordinarily sensitive yet rugged, unfailing in operation, practically fool-proof and trouble-proof, virtually free from the necessity of servicing. Titans are already standard equipment on the majority of storage heaters approved by the American Gas Association. They are available for any size from the smallest to the largest. Write for details.

THE TITAN VALVE & MANUFACTURING COMPANY

Thermostats :: Safety Pilots :: Relief Valves

9913 ELK AVENUE, CLEVELAND, OHIO



EVEREADY
TRADE MARK

INDUSTRIAL FLASHLIGHT

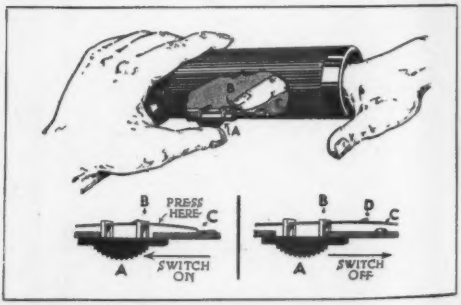
"Built for Rough Treatment"

The "Eveready" Industrial Flashlight is built for ROUGH treatment. The entire outer casing is made of heavy fibre reinforced inside by brass parts to help withstand severe service. The lens and lamp are protected by a special cushioning which softens the hardest impact. This flashlight has no exterior metal parts and it is completely insulated for working around "hot" wires, and therefore prevents shocks and short circuits. The casing will not dent and is not affected by oils, grease, gasoline, alcohol or other solvents and does not deteriorate with age.

The moulded slide switch is positive in operation and slides "on and off" easily. The whole assembly can be readily taken apart and put together without tools. Particles of grit cannot cause trouble.

TO REMOVE: Slide the switch "A" to the "on" position and hold it firmly against the tube with the thumb. Insert longest finger of right hand in tube and press brass contact strip "C" directly in front of lug "B". This pressure releases the latch and the strip will slide out.

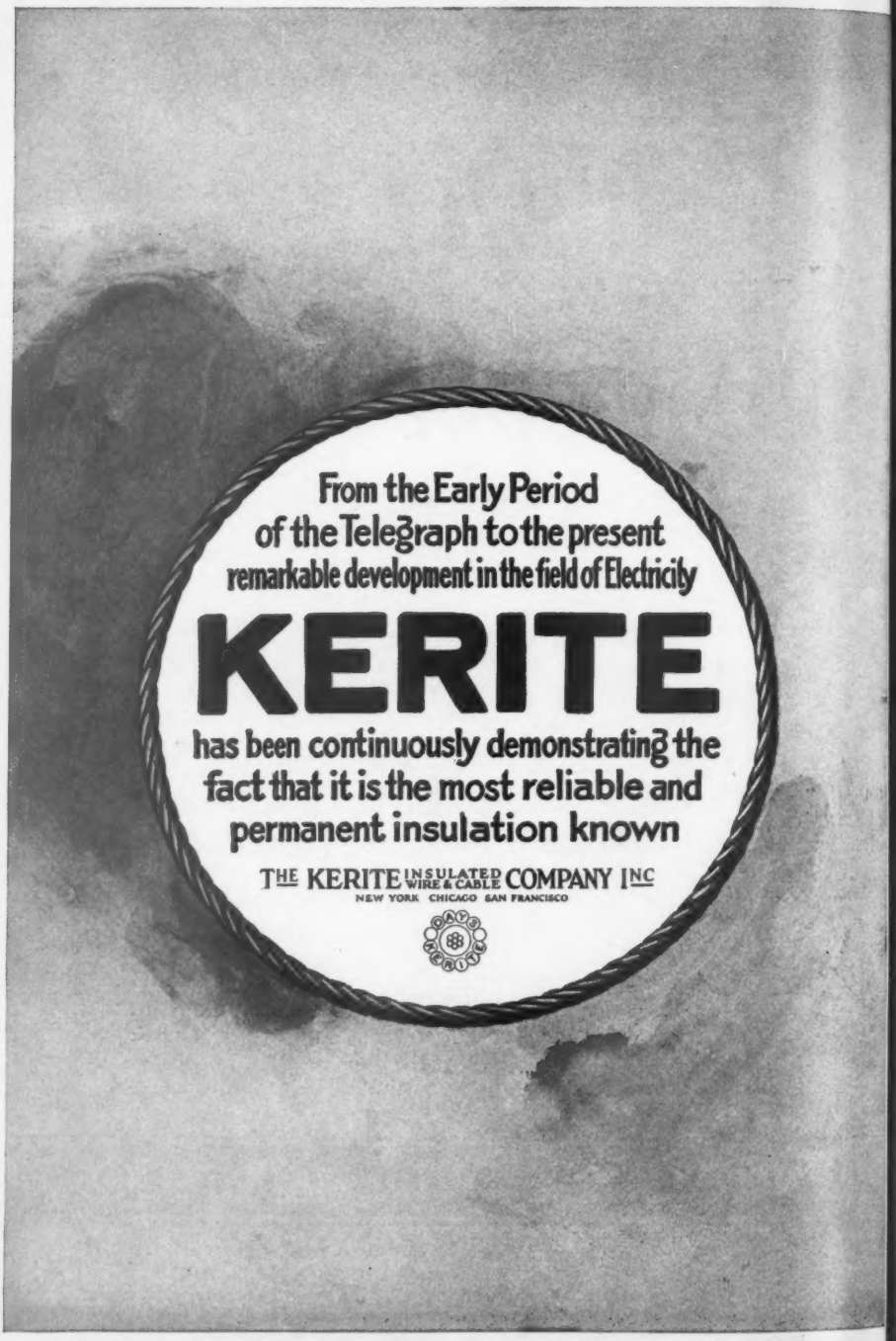
TO REPLACE: Hold flashlight as shown and press the switch "A" in the "off" position, holding it firmly against the tube. Insert brass contact strip "C" with the small raised latch piece "D" on the top. Push it through the slot in the first lug "B". Press down on the slide to flatten the "bow". This pressure will lift the end so it may be pushed in through the second lug. Continue to push forward until a distinct click is heard. Then the switch is latched and properly assembled.



NATIONAL CARBON COMPANY, INC.

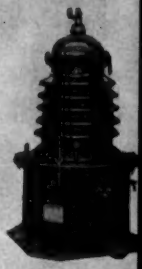
General Offices: New York, N. Y. • *Branches:* Chicago, San Francisco

Unit of Union Carbide and Carbon Corporation



69-KV CURRENT TRANSFORMERS

46-KV POTENTIAL TRANSFORMER (SINGLE BUSHING



THE OLD		THE NEW
ight (inches)	117	42
ight (pounds)	1300	600
(gallons)	80	11
ulating Liquid	Oil Only	Oil or Pyranol

THE OLD		THE NEW
Height (inches)	87	48
Weight (pounds)	2000	800
Oil (gallons)	100	20
Insulating Liquid	Oil Only	Oil or Pyran

PROGRESS THAT HELPS YOU

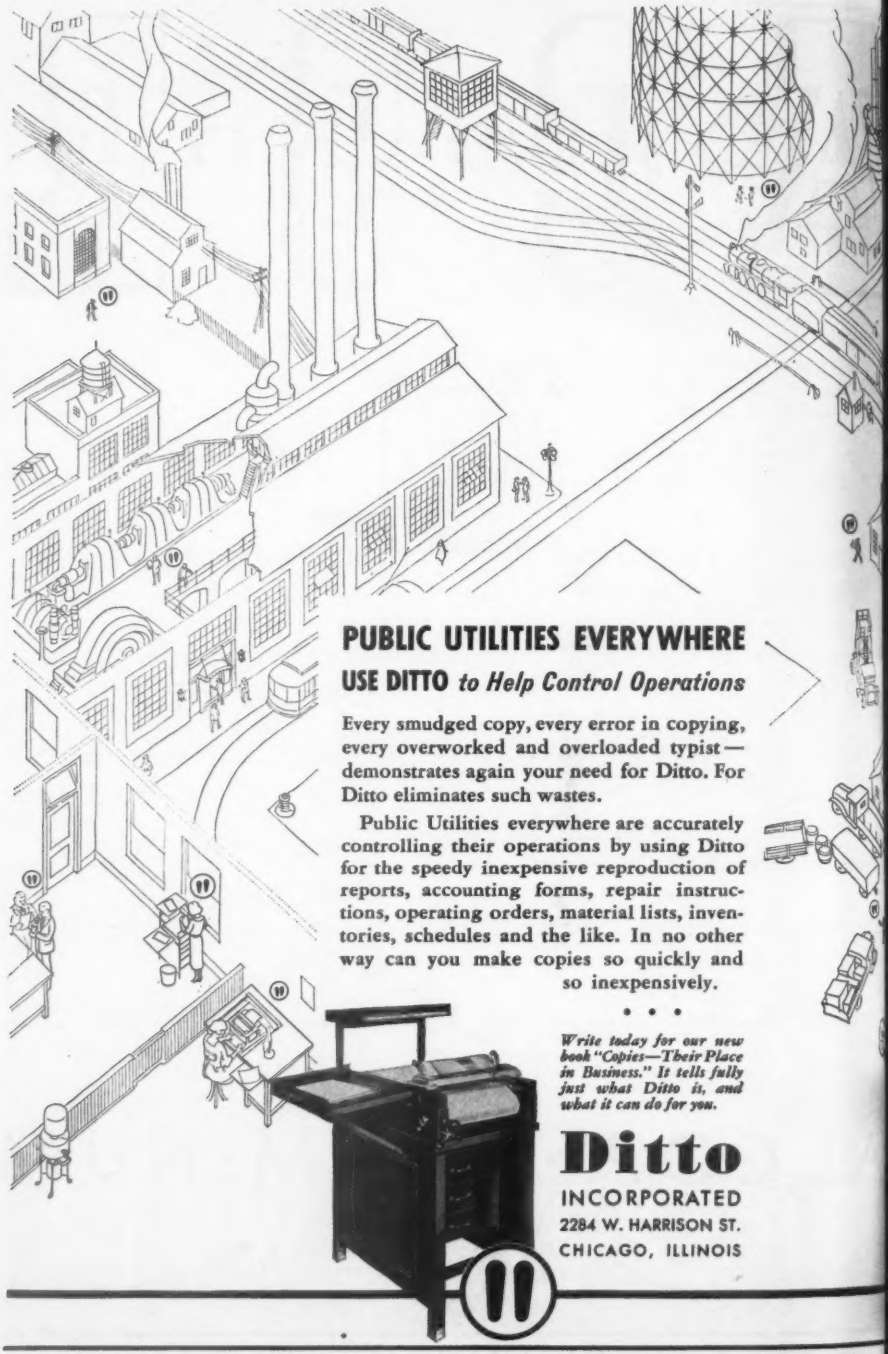
WHEN we cut the size and weight of a high-voltage instrument transformer by as uch as 50 per cent; when we greatly reduce e amount of insulating liquid required — and ake the installation nonexplosive, noninflam-able, and therefore safer—then we have made rogress that saves you money in installation, peration, and maintenance.

eneral Electric engineers have made equally gnificant strides in the development of turbine-enerators, voltage regulators, substation equip-ent, switchgear, and meters. Compared with quipment built only a few years ago, there is ardly an item in our present line of power ap-paratus that does not represent substantially increased values—values that you can measure in terms of improved performance. Or, in other words, reduced operating costs and better serv-ice to your customers.

Your choice of modern equipment that incor-porates these developments assures you, there-fore, of greater value. When you purchase electric apparatus from a manufacturer who is equipped with proper facilities and who has the vision to do this kind of work, you encourage him to do more and more of it, and you are assured of continued progress in your industry.

96-3941

GENERAL ELECTRIC



PUBLIC UTILITIES EVERYWHERE

USE DITTO *to Help Control Operations*

Every smudged copy, every error in copying, every overworked and overloaded typist—demonstrates again your need for Ditto. For Ditto eliminates such wastes.

Public Utilities everywhere are accurately controlling their operations by using Ditto for the speedy inexpensive reproduction of reports, accounting forms, repair instructions, operating orders, material lists, inventories, schedules and the like. In no other way can you make copies so quickly and so inexpensively.

• • •

Write today for our new book "Copies—Their Place in Business." It tells fully just what Ditto is, and what it can do for you.

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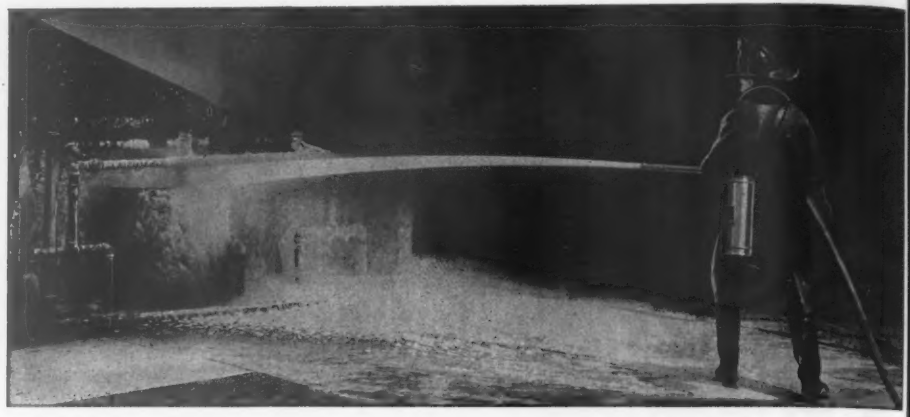


A New Low-Cost Foam Tool!

Combines Water, Solution and Air To Form Fire-Smothering Foam

Public utilities are welcoming this revolutionary larger-capacity foam equipment for flammable liquid fires.

The specially designed PHOMAIRE Play Pipe connects to your hose line (¾" to 2½"). When the water is turned on, PHOMAIDE, a new foam-making solution carried in a Hip Pack, and air are automatically drawn into the water stream in the proper proportions to form foam.

There are no complicated preliminaries, no confusing adjustments, no moving parts. And only one man is required at the Play Pipe.

Less than 20 gallons of water at a pressure of 75 pounds or more are required per minute. This is the only efficient foam unit available for small lines. One gallon of Phomaide Solution makes 350 gallons of foam. 300 to 400 gallons per minute may be continuously produced by merely pouring additional solution into the Hip Pack.

This is NEWS. Without obligation, ask for descriptive literature, prices and a demonstration of the Phomaire Unit illustrated at the left. Don't wait! Mail your request now.

Get the Latest Foam Equipment

Phomaire PLAY PIPE and Phomaide SOLUTION

developed, made and sold by

Pyrene Manufacturing Company
NEWARK NEW JERSEY
ATLANTA KANSAS CITY CHICAGO SAN FRANCISCO

AIR CONDITIONING

—not a speculation, but an Investment!

Frigidaire *Controlled-Cost* Air Conditioning builds summer profits and year 'round good will

DELCO-FRIGIDAIRE automatic heating, cooling and conditioning equipment... "Products of General Motors" that are changing property values overnight

AirConditioning is **here**—not "just around the corner"—not "the next boom industry"... but an accomplished and practical **fact** today!

To the sound, far-seeing business man it is a powerful bid for public favor—for a larger share of today's increased spending... **a sound and profitable investment.**

Summer air conditioning, which in its effect is chiefly **cooling,** is based on electric refrigeration.

For more than eighteen years, General Motors has been building Frigidaire electric refrigerating equipment for stores and homes.

General Motors developed Freon... the cooling fluid on which modern, low-cost safe electric refrigeration is founded... **and on which all modern air conditioning is based.**

General Motors developed finned cooling coils and compact compressors which set new standards of efficiency... in electric refrigeration and, therefore, **in air conditioning.**

And it is this experience which has now put air conditioning on a business-like basis... has made possible, in short, **Frigidaire Controlled-Cost Air Conditioning.**

No two stores or rooms are alike in size. Few are alike in other conditions affecting air conditioning. Most jobs require special handling.

With Controlled-Cost Air Conditioning you know what you are getting—what it will do—and **because** you know, you can **control** the cost. You get the kind of system that best suits your building... whether new or old... owned or leased. And you get the amount of air conditioning any business needs.

Whatever your interests—whatever your problems, it will pay you to talk to Delco-Frigidaire Conditioning Division, General Motors Sales Corp., Dayton, Ohio.

KEEP COOL ALL SUMMER LONG

with this Frigidaire Electric Room Cooler

Costs only a few cents a day to operate ... ideal for office or bedroom ... quiet, trouble-free, *PROVEN.* All the cooling equipment is housed in attractive cabinet, as illustrated . . . no extras to buy . . . quickly installed.

More in use than all other makes combined!

It Pays to Talk to

DELCO-FRIGIDAIRE

The Air Conditioning Division of General Motors

AUTOMATIC HEATING, COOLING AND CONDITIONING OF AIR

When *Results* Are Needed, Specify INTERNATIONAL Power

An International TD-40 Diesel TracTracTor equipped with bulldozer—a fast, economical outfit for backfilling, clearing right-of-ways, and other work. International TracTracTors and wheel tractors, working alone or in combination with a wide variety of equipment, bring efficiency to scores of jobs the year round.

Let this sound advice from *experienced* users direct your purchases of industrial tractors and power units. Cash in on the advantages INTERNATIONAL *Performance* and INTERNATIONAL *Economy* bring to the job — advantages that are mighty good when the cost sheets are figured.

International Industrial Power has a reputation for getting things done fast—that's why you find the *big* jobs being turned over to International. And when service is needed, the low maintenance cost of each unit in the International line means amazing savings.

Wheel and crawler tractors (gasoline and Diesel), and power units (gasoline and Diesel) ranging up to 110 max. h.p., are available. See the nearby International industrial dealer or Company-owned branch for complete information.

INTERNATIONAL HARVESTER COMPANY

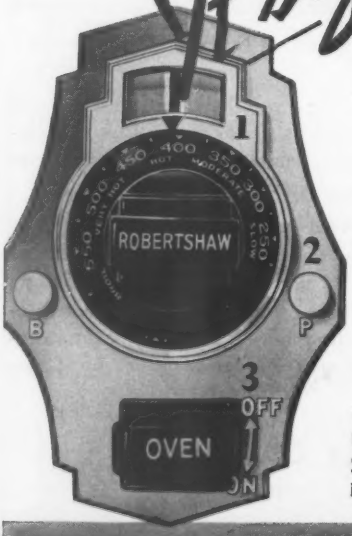
606 So. Michigan Ave. (Incorporated) Chicago, Illinois

INTERNATIONAL HARVESTER

THE MODELS THEY'LL BUY WILL HAVE

It signals

ROBERTSHAW
OVEN-HEAT-CONTROL
with the Thermal Eye



Oven heat control takes a big step forward and brings you a thermostat that *signals* when the oven reaches the dialed heat!

Robertshaw has introduced this sales-attracting control in models for both *gas* ranges and *electric* ranges.

The electric models are equipped with an "on" signal that glows with a steady light as long as the oven switch is on.

No matter which type of range you feature—electric or gas—it will sell better and sell faster if Robertshaw Thermal-Eye-equipped.

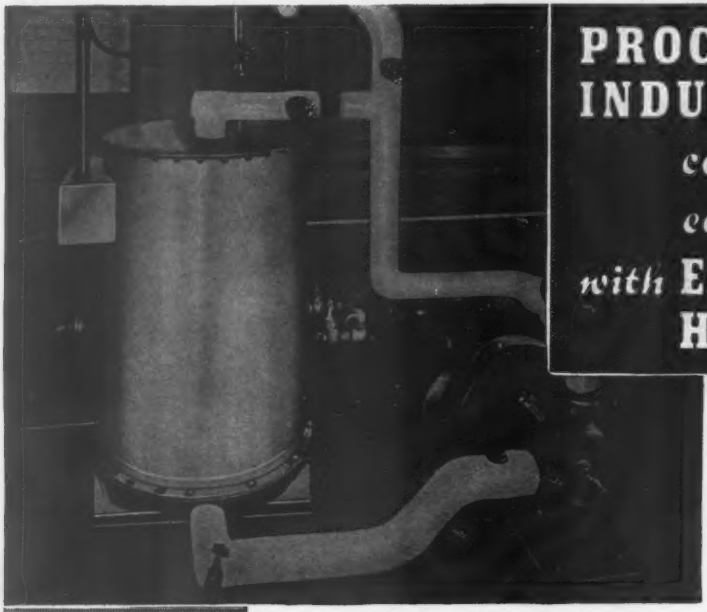
OVER 2,800,000 IN USE

1 IN THE WINDOW the red signal swings into view

2 OVEN BY-PASS (B) and safety pilot (P) are easily adjusted.

3 ON THE BEZEL is the oven cock. Model illustrated is for gas range. Other models for every gas or electric service need.

ROBERTSHAW THERMOSTAT COMPANY · Youngwood, Penna.



PROCESS INDUSTRIES *can effect economies with* ELECTRIC HEAT

Typical installation of Elliott electric hot oil circulating heater

ELECTRIC HEAT can show substantial overall savings when compared with other high-temperature heating means.

The cost of heat in a process is actually a minor item, as compared with the major costs of operation, materials, fixed charges and maintenance labor. Heat frequently represents less than one per cent of the total cost.

Electric heat can reduce waste or spoilage of material, thus increasing the yield. It can reduce overhead charges by virtue of increased production, at the same time improving the quality of the finished product.

Such results are being obtained with Elliott electric heating systems, specially designed for the process industries. In one instance, the cost of electric heat was $1.80 per hour, the value of the increased yield $23.40 per hour. There were also savings in steam and labor, and the value of the product was increased due to improved quality.

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There are several Elliott electric heating systems, some using electric heat indirectly by heating and circulating oil or diphenyl vapor. There are also immersion type heaters, special tubular heaters, continuous systems for deodorizing edible oils, fat splitting, distillation of fatty acids, and the treatment of tung and various other oils.

You should know something of these systems. Literature is available upon request.

ELLIOTT *Electric Heating Systems for the Process Industries*

ELLIOTT COMPANY PITTSBURGH, PA.

Heat Transfer Dept., JEANNETTE, PA.

District Offices in Principal Cities

M-7

Utilities Almanack

MAY

27	T^{h}	¶ *Southeastern Electric Exchange begins annual convention, Hot Springs, Va., 1937.* ¶ *National Electrical Wholesalers Asso. concludes meeting, Hot Springs, Va., 1937.*
28	F	¶ *Westinghouse Agent-Jobbers' Association starts session, Hot Springs, Va., 1937.*
29	S^{a}	¶ *Canadian Gas Association will hold annual convention, Ottawa, Canada, June 10, 11, 1937.*
30	S	¶ *Second World Petroleum Congress will convene, Paris, France, June 14-20, 1937.*
31	M	¶ *Pennsylvania State Association of Township Commissioners begins convention, Pittsburgh, Pa., 1937.*

JUNE

1	T^{u}	¶ *Edison Electric Institute opens annual convention, Chicago, Ill., 1937.*
2	W	¶ *New York State Telephone Association convenes for session, Rochester, N. Y., 1937.*
3	T^{h}	¶ *American Petroleum Institute ends 3-day meeting, Colorado Springs, Colo., 1937.*
4	F	¶ *Public Utilities Advertising Association will hold annual meeting, New York, N. Y., June 20–23, 1937.*
5	S^{a}	¶ *Canadian Electrical Association will hold convention, Banff, Alberta, Canada, June 21–24, 1937.*
6	S	¶ *Pacific Coast Gas Association will hold Northwest conference, Seattle, Wash., June 25, 26, 1937.*
7	M	¶ *American Water Works Association starts annual convention, Buffalo, N. Y., 1937.*
8	T^{u}	¶ *American Gas Association, Industrial Gas Section, opens industrial gas sales conference, Chicago, Ill., 1937.*
9	W	¶ *American Institute of Electrical Engineers will convene for summer session, Milwaukee, Wis., June 21–25, 1937.*

Photo by Publishers' Photo Service, N. Y.

Light and Power

To stimulate the use of new materials in art and architecture, this figure —to be "sculptured" entirely of stainless steel and pressed glass—has been designed for use in the new office building of the Niagara Hudson Power Corporation and the Syracuse Lighting Company.

Public Utilities

FORTNIGHTLY

VOL. XIX; NO. 11 MAY 27, 1937

The Power Issue in a Nutshell

Shall the government confine itself to punishing wrongdoing, or proceed vindictively against guilty and innocent alike; and if it is to set up standards or yardsticks for any purpose, shall those yardsticks be honest yardsticks; shall the government's conduct itself be above reproach?

BY C. W. KELLOGG

PRESIDENT, EDISON ELECTRIC INSTITUTE

THE time has come when the electric power question should be reëxamined on its merits. Electric service is an essential of daily life to 26,000,000 American families and the investment in plant to furnish it has been contributed by many millions of security owners. Both of these are fundamental economic matters which do not thrive in an atmosphere of hate or suspicion, yet as matters are now drifting, the important question of public policy with respect to the electric service of the nation seems to be assuming the aspect of an old-fashioned fight, wherein the issues that started consideration of it are overlooked in a mere desire to soak someone on the other side.

Let us attempt to analyze this subject historically.

Starting with first principles, it developed forty years ago that the electric business had to be a monopoly—not in order to create "vested interests" but because the amount of capital for plant investment required per dollar of annual gross revenue was so large (about five or six to one) that monopoly was essential to avoid the

shocking waste (and hence loss to the public) which had resulted when competition, with duplication of investment, was tried. Monopoly was therefore found to be essential in the public interest.

Granting the public necessity for monopoly, the next question was of public control, for, human nature being what it is, it was early found inadequate to the task of voluntarily giving to the people all the benefits which monopoly should have conferred upon them. The original electric plants were entirely in cities and the first public controls of utilities were set up by city councils or other municipal governments. These gradually proved unsatisfactory to the public from two general causes: one, the unavoidable effect of selfish local interests, and two, the lack in most city governments of the technical knowledge and broad experience necessary to handle fairly and wisely the complexities of utility regulation.

To avoid these two basic difficulties, regulation was undertaken by the states through public service commissions. In the course of time most of the forty-eight states have set up such commissions. They represented a tremendous advance over previous control by local city governments. They not only were on the whole far enough removed from selfish local interests to rise above them, but were able to employ the technical assistance and to acquire the broad experience requisite for fair and adequate regulation. They did more than that. With the passage of the years they built up a system of principles for regulation of rates and service, which came to give the investing public a basis of underlying principles; this in turn gave investors confidence in the safety of utilities as a form of investment, thus making possible the raising of the huge amounts of capital required at lower interest rates and hence less cost to the consumer of electricity. These functions of utility regulation the state commissions are continuing to perform with general satisfaction up to the present day.

In the meantime two major problems in the utility business itself were gradually developing to usher in the present situation. Like many chronic troubles in the human body, this power question in the body politic has been a long time developing.

Going back again to first principles, the electric business at first was intensely localized around the power station, because the power could not be sent far without excessive loss. Alternating current, whose voltage could be raised or lowered through a transformer, together with learning how to control the higher voltages for transmission purposes, gradually opened up the little town or hamlet all over the country as additional territory for electric service. The spreading-out process induced by these possibilities began over thirty years ago and (with the still further extension into farming area) is continuing to the present day. Up to the beginning of the depression, about 1930, the rate of expansion was an accelerating one, so that the $6,500,000,000 invested in the electric utilities during the seven years ending 1930 was substantially more than the total investment at the beginning of the 7-year period.

The two basic problems in the utilities which showed up from the earliest days, and which grew ever more prominent as the industry grew in size and complexity, were (1) the necessity for a high degree of technical skill and broad experience for the successful operation of utilities, and (2) the requirement for and difficulty of raising the equity money (*i.e.* the security margin for supporting senior issues) for financing utility growth. These two things were not only essential for the successful operation of any utility but, for the small isolated property, were practically impossible to obtain —the first because of the relatively high unit cost of the necessary talent and experience, the second due to the small size of the property making marketability for its common stocks nonexistent. The problem, which grew more insistent with the widening field covered by the electric utilities, was how to procure for the isolated property these two requisites of capable management and adequate common stock financing which for such a property by itself were inherently unprocurable.

THIS problem was solved by the holding company. By combining the financial strength of a group of properties the holding company was able to purchase for the isolated property the same quality of management as the great urban property was able to purchase, and, by dividing this expense among many properties, was able to bring the unit cost for each property within its means. The aggregate size which the holding company represented was such also as to make possible common stock issues of a marketable size, which gave to the small isolated property the financial base needed for supporting its bond issue. It is through the holding company, and through this means alone, that the widespread diffusion of electricity throughout the country has been made possible. It is only through this means that it has been possible to establish in the sparsely settled areas electric rates reasonably comparable with those in the larger urban centers.

Only within recent months has a compilation of figures been made to show how effectively the holding companies have actually performed this equity financing function which theoretically they were set up to perform. This study shows that in the five years ending in 1930 the dozen largest holding companies of the country raised, through their own credit as holding companies, one-third of the $3,000,000,000 cash expended during that period on the physical properties of their systems. This one-third was raised on the credit of the common

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¶ "THE *very success of the holding companies in performing their essential public service functions with respect to management and financing led to some abuses—not universal by any means but apparently widespread enough to cause public inquiry and condemnation. The abuses in general arose from an unavoidable lack of arm's length bargaining. . . .*"

stocks of the operating companies, which became effective financing media solely through the diversity and size which their common ownership by the holding companies furnished them.

THE very success of the holding companies in performing their essential public service functions with respect to management and financing led to some abuses—not universal by any means but apparently widespread enough to cause public inquiry and condemnation. The abuses in general arose from an unavoidable lack of arm's length bargaining between the constituent companies in the system, leading to such things as loans from subsidiaries to holding companies (so-called "upstream" loans), unjustified profits for management, financing, or construction services and the improper reporting of the true net earnings of some holding companies (due to including intersystem profits) which resembled in principle the effort to raise oneself by one's bootstraps. Also, competition among holding companies in the purchase of operating companies led to the payment of prices therefor not justified by their earning power. This was unjustly accused of causing high rates to the customers of properties so bought (the real sufferer being the stockholder of the holding company) but it became a recognized evil. The record shows that the large holding company systems have made the greatest rate reductions in the last decade.

These and other alleged improper activities by the electric utilities in the matter of publicity, were the subject of a long investigation by the Federal Trade Commission from 1928 to 1935. The investigation was ex parte, no examination of witnesses at hearings having been allowed, but was thoroughly publicized during its progress and stirred up a general public attitude of hatred and suspicion. The feeling was expressed that the holding companies, not being themselves public utilities, were not controlled or regulated by the state public service commissions and that therefore only the Federal government itself could and should adequately regulate them.

AT all events, the final result of the Federal investigation, and the agitation which it engendered, was the so-called Public Utility Holding Company Act of 1935. This act, which many able lawyers believe to be unconstitutional, provided for the regulation by the SEC of the alleged abuses set forth above. This the holding companies would have been willing to accept but, not content with regulating abuses, the act also provides for the partial dissolution of many holding companies on grounds not related to their public service value. Regulation by destruction seems so crude and un-American that most of the holding companies affected by this dissolution provision have resisted it through the courts. They feel that while the abuses of the past should properly enough be regulated out of existence, the destruction or crippling of the great public service they perform represents a sadistic and feudist viewpoint and one not in the public interest.

The governmental animus against the electric utilities has been developed in two other directions—the so-called "yardstick" plants of the Tennessee Valley Authority (TVA) and the

Governmental Resort to Condemned Practices

"SURELY one of the basic purposes of government is to protect the people from the wrongdoing of any of the members of the body politic. In giving this protection it is basic in our civilization that the guilty, not the innocent, should be punished or restrained and that the government should not combat condemned practices by itself resorting to them."

donation of funds by the Public Works Administration (PWA) and the Works Progress Administration (WPA) to cities to enable them to compete with their existing utilities. Just a word about each of these:

THE dams being built by TVA are stated in the act creating that body to be for the improvement of navigation and the control of floods—the development of electric power being claimed by the government to be "incidental" to the two Federal functions of navigation and flood control.

It can be shown from Federal government reports that the total cost of the TVA projects, including electric power, estimated at $337,000,000, exceeds the cost of the same series of dams for navigation alone by $262,000,000, so that 78 per cent of the cost arises from power alone. If the TVA allocated its investment cost on this factual basis, three-quarters to electricity and one-quarter to navigation, it might, to that extent at least, be a fair yardstick; but it would demonstrate at once that electricity is not, as has been alleged, the incidental result of navigation improvement but the principal thing sought and hence illegal.

Up to date the TVA has not allocated any of the cost of its hydroelectric development to electricity, so that it cannot yet be determined what it proposes to do about this fundamental point—fundamental because 85 per cent of the cost of hydro power consists of charges on the investment.

TVA has also subsidized a number of its small city retail customers by itself furnishing services of substantial amount, which do not, therefore, appear on the customer's books. This causes the city to appear to make a financially satisfactory showing (impossible without such subsidy) on rates which are below what private electric companies could afford to charge.

THE PWA and WPA donations to cities amount to 30 per cent and 45 per cent respectively of the cost of construction of an electric system to compete with the existing system. The alleged purpose of these donations (not loans but outright gifts) was to give relief to the unemployed but the competitive effect is tremendous. These grants have no relation to the adequacy of the existing electric service; none is made for gas service or transportation service, both of which are more likely to need such largesse, but only for electricity; to their victims, therefore, they seem to be based more on vindictiveness than on public need.

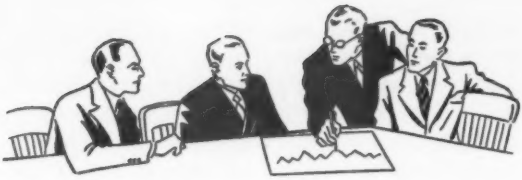
No plea is made or intended herein for any special privilege or exemption from proper regulation either for the operating electric utility or for the holding company which may control such operating utility. If any such is guilty of practices contrary to the public interest, it should be prevented by law from continuing such practices. What is objected to (and that is the purpose of this article) is the wholesale attack by government on the property of a certain group of its thrifty citizens merely because wrongdoing is claimed to have been discovered on the part of some members of the group.

Surely one of the basic purposes of government is to protect the people from the wrongdoing of any of the members of the body politic. In giving this protection it is basic in our civilization that the guilty, not the innocent, should be punished or restrained and that the government should not combat condemned practices by itself resorting to them. The first of these principles is violated in the dissolution of holding companies, which have a long record of useful and effective public service, for reasons independent of any question of wrongdoing, and in the donation of funds for destructive competition against companies regardless of their deserts. The second principle is violated in the bookkeeping methods of the TVA, which, by purporting to show what is not so, is merely an imitation of one of the very practices which the public condemns and which the government, in seeking to eradicate, should not itself perpetuate.

THE President of the United States in his second inaugural address called for an "era of good feeling." Nothing could be better for any nation or community. It is the exact opposite of vindictiveness. So far as the electric utilities are concerned (after all but a small item in the national economy, the electric bill being but 2 per cent of the family budget) I think the "era of good feeling" should bring a new realization of the wonderful public service this industry has performed.

I would have the government entirely ruthless toward wrongdoing but would have its restraint confined to the wrong, not to everyone else engaged in the same activity. If the government decides to give an example of performance in any activity, I would have its methods so far above reproach as to furnish standards which all honest men could conscientiously imitate.

An "era of good feeling" should be one of destruction of the evil but also one of coöperation with the good and useful.



The New Accounting Program

Problems arising under the electric power classification prescribed by Federal and state utility commissions, with particular reference to original cost of property.

By LUTHER R. NASH

PUBLIC utilities are this year confronted with new and more complicated accounting methods which embody some extraordinary concepts, particularly relating to property records. The full significance of the reclassification of older Fixed Capital and the permanence of the results as embodied in the new Plant accounts may not be realized by the electric power companies affected. The purpose of this article is to point out the possibility of initial errors of substantial magnitude which may continue in effect as long as the property to which they relate survives.

The new accounting program includes a classification prescribed by the Federal Power Commission for licensees and electric power companies engaged in interstate operations, effective on January 1, 1937, and a substantially identical system, approved for intrastate use by the state regulatory commissioners at their 1936 annual convention. A new classification for gas companies embodying similar principles was also approved at that convention.

The new electric power classification has been either formally adopted by the commissions or may be used by electric power companies at their option, in nearly twenty states. Hearings relating to such adoption have been held in other states and more extended use in the near future is to be expected. These new accounting methods are intended to take the place of a system prescribed by the Federal Power Commission for licensees in 1922 and the so-called Uniform System of Accounts approved in the same year by the National Association of Railroad and Utilities Commissioners and generally used by utilities since that time.

While it is not the present purpose to review the 1937 requirements in detail, a reference to some of the important new features may be appropriate. They include many subdivisions of prior accounts by geographical areas or classes of property, apparently for functional or cost accounting purposes, and a minute break-down of construction overheads. Among the divisions is that between transmission and distribution, applying to both capital and operating accounts and involving dis-

tinctions often difficult to make and maintain. While the treatment of depreciation accounting is not wholly clear, the instructions relating thereto do not provide for the mathematical exactness and rigidity embodied in straight-line depreciation. As far as the state commissions are concerned, it is apparently intended that they may use their own judgment in interpreting the classifications, including a continuation of retirement accounting where it has been found satisfactory.

THE outstanding feature of the new system with which the balance of this article deals is its treatment of what has previously been called Fixed Capital. This term has disappeared, and its single summary account is replaced by a group of accounts, the primary purpose of which is to segregate from other fixed capital elements the actual cost, at the time it was first devoted to public service, of surviving property in utility service. If the present owner of the property paid a previous utility owner more than that cost, the excess is set apart in a so-called Acquisition Adjustments account.

The apparent purpose of the segregation of the original cost of property, to which the term "aboriginal" cost has frequently been informally applied to avoid confusion between original cost and present owners' investment, is to inject a new measure of fair value into regulatory procedure. We have heretofore had no single measure of fair value. Our Supreme Court has given major consideration to the cost of reproduction less depreciation and actual investment, the former having been given more weight in leading cases. A considerable number of the state commissions have leaned toward investment and a few of them, particularly Massachusetts and California, have used it almost exclusively. An examination of the Supreme Court decisions in rate cases does not disclose any in which "aboriginal" cost has been clearly recognized as an important guide to fair value.

THAT it is the intent of the new accounting system to substitute original cost in place of actual investment as a measure of value is indicated by the provision that the Acquisition Adjustments account shall be "depreciated, amortized, or otherwise disposed of, as the commission may approve or direct." Such a provision also applies to another somewhat similar account, Electric Plant Adjustments.

That commissions will not be permitted arbitrarily to dispose of the items in Acquisition Adjustments is assured by a decision of the Supreme Court of the United States, dated December 7, 1936, in which similar accounting methods, prescribed by the Federal Communications Commission and contested by the American Telephone and Telegraph Company, were given consideration. This decision recognized that the purchase price of property in excess of its original cost might represent real value and, as such, should not be eliminated. The court secured a commitment from the Federal Communications Commission with respect to this matter, which it accepted as a "declaration of administrative construction binding upon the commission in its future dealings with the companies."

The decision contains the following specific language submitted by the com-

mission as its understanding of the way it would interpret its Acquisition Adjustments account—"amounts included in accounts 100.4 that are deemed, after a fair consideration of all circumstances, to represent an investment which the accounting company has made in assets of continuing value will be retained in that account until such assets cease to exist or are retired."[1] Although this decision sustained the constitutionality of the segregation of original cost, it clearly restricted the rights of the commissions at their discretion to prescribe its gradual elimination through surplus or otherwise at the expense of the owners of the property.

THE utilities have believed that, where original cost was significant, it could be determined by accounting research and thereafter brought up to date if and when required through subsidiary records, thus avoiding the cloud upon outstanding securities which emphasis on the new account, Plant in Service, might occasion. One feature of this accounting for property, as distinct from its operations, which deserves particular emphasis is its permanence. Revenue, expense, and many other accounts are largely of transient interest. Property accounts are cumulative and errors therein may continue as long as the property or accounting system survives. It is, therefore, extremely important that a new system of property accounts should embody all possible accuracy in its opening entries.

An examination of the accounting requirements applicable to Electric Plant shows the following subdivisions of the main account, No. 100.

100.1—Electric Plant in Service
100.2—Electric Plant Leased to Others
100.3—Construction Work in Progress
100.4—Electric Plant Held for Future Use
100.5—Electric Plant Acquisition Adjustments
100.6—Electric Plant in Process of Reclassification

There is an additional account 107, Electric Plant Adjustments, which is intended to include any arbitrary changes in Fixed Capital and other differences for which provision is not made elsewhere.

Account 100.1 has 93 subaccounts to provide for different types and classes of property. Two of the succeeding permanent subaccounts use similar subdivisions as far as applicable. The Acquisition Adjustments account provides for separate statements for each acquisition with pertinent supporting details. Account 100.6 is to be used

[1] American Teleph. & Teleg. Co. *v.* United States, 16 P.U.R. (N.S.) 225, 231, 57 S. Ct. 170.

¶ "THE *outstanding feature of the new system . . . is its treatment of what has previously been called Fixed Capital. This term has disappeared, and its single summary account is replaced by a group of accounts, the primary purpose of which is to segregate from other fixed capital elements the actual cost, at the time it was first devoted to public service, of surviving property in utility service.*"

only as a temporary account to be cleared after 1938. It will be opened with the total Fixed Capital shown in earlier accounting systems.

THE magnitude of the task of reclassification is difficult to visualize. Some conception of its scope may be gathered from a consideration of the history of an assumed electric power system having its origin in the earliest years of the industry.

This company has been through several reorganizations involving restatements of fixed capital, and it or its predecessors have purchased independent properties or systems, some of which had in turn made similar purchases, in one case of a competing company. Most of these purchases were for lump sums, usually greater than the recorded Fixed Capital at the time of acquisition. In some cases there were no details of acquired property, or, at any rate, such records no longer exist.

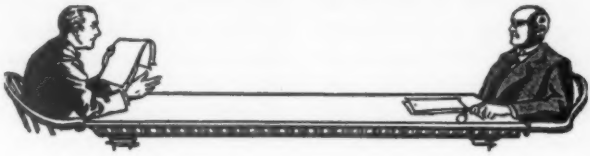
One of the predecessor companies, convinced that its early accounting methods were inaccurate and unreliable, made a revision of Fixed Capital based on a careful estimate of actual cost in accordance with modern accounting standards. Most of the originally independent units had changed their systems of accounts, by regulatory orders or otherwise, and some of the unclassified totals carried over to the new systems were never distributed.

The company has several items of property not in utility service, some of it leased to others and some held for its own future use. All of this property was brought into the present system in connection with lump sum acquisitions.

MOST of the original property has, of course, long since disappeared, but some old structures still remain, although repeated additions, alterations, and betterments have made it impossible to segregate the original property. Some old plans, fragmentary inventories or appraisals, and other records still survive, and some of the older employees have good memories of early conditions.

All Fixed Capital representing the surviving property in this assumed company, transferred as a lump sum to new account 100.6 on January 1, 1937, must be wholly cleared and restated by December 31, 1938. This involves an examination of each acquisition of an operating unit or system by the company or any predecessor to determine the difference between the original cost of the property then existing and the acquisition price. Each reorganization and change in statement of Fixed Capital through appraisals or for other reasons must also be examined and any differences arising therefrom, other than for correction of earlier accounting errors and coincident acquisition adjustments, must be set up in account 107 in similar detail. Each of these examinations must distinguish property not in use by the company, and segregate any acquisition or other restatement of Fixed Capital relating thereto.

The assumed property used as an illustration had a history no more complicated than that of many which will be subject to the new fixed capital accounting requirements. In fact, a large number of properties have had a series of reorganizations and consolidations or other corporate changes involving more complications than those as-



Cumulative Errors in Property Accounts

"REVENUE, expense, and many other accounts are largely of transient interest. Property accounts are cumulative and errors therein may continue as long as the property or accounting system survives. It is, therefore, extremely important that a new system of property accounts should embody all possible accuracy in its opening entries."

sumed, including less complete records than those now in the files of the assumed company.

THE new accounting system requires that where records of original cost are not available such costs shall be estimated as accurately as possible. The estimating process must in fact be applied to a substantial amount of existing property. In certain cases it has been found that, although there have been very few complications due to corporate changes, the accounting records are so incomplete with respect to large proportions of the existing property, made up of many small units, that it is advantageous to prepare a detailed inventory from which to estimate their cost at the time of installation. Under other and more complicated conditions such inventories may not only be expedient but necessary for a reasonable approach to accuracy.

The status of many small units of property is uncertain, that is, as to whether they were installed by the present company or some predecessor. With respect, for example, to a pole in a particular location where a pole has been in service for many years, it is known that the present pole is not that which was originally installed at that location. Furthermore, it is probably not the pole which appears in the present Fixed Capital for the reason that it has been common practice to replace single or small groups of poles through maintenance, regardless of the fact that the substitute poles may have been more substantial and cost more than their predecessors.

IT is conceivable that present accounting records may include the cost of the great-grandfather, so to speak, of the pole now existing in a particular location. Incidentally, the 1937 accounting system requires retirement and plant entries in connection with the replacement of each single pole, thereby insuring against a continuation of such complications. Many substitutions and substantial modifications of other kinds of property have been made from time to time and have not found their

way into fixed capital records. In the early years, also, many fixed capital entries covering incidental additions to property included only the material involved, other cost elements such as labor, administration, and incidental expenses having been recorded elsewhere.

Instructions relating to the new Plant accounts require that cost as recorded "shall include not only the materials, supplies, labor, services, and other items consumed or employed in the construction and installation of electric plant, but also the cost of preliminary studies, plans, surveys, engineering, supervision, and general expenses, which contribute directly and immediately to electric plant." Presumably this means that account 100.1, Electric Plant in Service, shall reflect the actual cost, as defined in the quoted text, of the presently existing property and not the cost of some similar article or item of property that may have preceded it but the survival of which is still assumed in Fixed Capital. Furthermore, if some of the items enumerated in the quoted text such as engineering, supervision, and the general expense were not originally included in Fixed Capital by the utility which accounted for the installation, they are an appropriate part of the "cost" to be presently recorded of the property in service.

ANY other procedure would retain Plant entries which lack uniformity in character and scope and are also inconsistent with those of other similar properties which had used different accounting methods in their earlier years. Furthermore, the future inclusion in Plant of items of a kind formerly charged to maintenance or other operating expenses without a corresponding restatement of past Fixed Capital would leave an unbalanced and inequitable relation between Plant and income which would only be cured at the end of a life cycle of depreciable property.

Where it is suspected or known that such discrepancies in older Fixed Capital are large and they cannot be corrected by translation into the new Plant accounts, the cost of a complete inventory of existing property and the pricing of it as of the known or estimated date of construction may well be justified. In the absence of detailed records of acquired property, such an inventory, traced back through work and purchase orders and retirement records where they are available, would disclose with reasonable accuracy the property existing at the time of acquisitions and would assist in developing a correct Acquisition Adjustments account. To the extent that values remain in this account, analyses should be made in such detail as will show their character and the extent of their permanence. Such studies should include the economies of operation and capital resulting from acquisitions and the extent to which they have been reflected in lower rates or improved service to the public. Only by such procedure can protection be assured against an excessive Acquisition Adjustments account or its gradual elimination.

ATTENTION should also be given to Account 107 which is intended to include that part of Fixed Capital not representing actual costs. That the classification does not intend that items in this account should be considered in determining a rate base is indicated by

the related instructions which provide that they "shall be disposed of as the commission may approve or direct." Obviously accounting records intended to reflect costs should not be based upon appraisals, however accurately made, as of some other date than that when the costs were incurred. If, however, a utility has found it appropriate at some time in its history, to restate its Fixed Capital solely for the purpose of correcting earlier errors in accounting methods, this should not be regarded as a "write-up" nor should such corrections be included in Account 107, but should be assigned to Account 100.1 where they properly belong.

It is, of course, true that properties exist which have had a comparatively simple history, without reorganizations or acquisitions of complete properties or systems or other significant corporate changes. The problem of such companies in translating their Fixed Capital into the new Plant accounts is comparatively simple. If the older records are reasonably accurate and complete and no entries are required in Account 100.5 or Account 107, it may be necessary only to reclassify existing Fixed Capital into the new Plant accounts with, however, the necessary subdivisions and regrouping for which provision is made, including separation of transmission property from distribution property and segregation of property leased to others or any that may not be presently in service. Such situations are exceptional.

In most cases it will be found that inaccuracies or inconsistencies in older accounting methods, particularly those of the early years of the industry, will justify the effort and cost necessary to reëxamine these accounts and restate them on the basis of more modern methods. If this is not done, it should be understood that the new Plant accounts, as translated from the old, will not represent the actual cost of the property as it exists, the extent of the discrepancies depending upon the accounting policies followed from time to time in the company's history. Such discrepancies will continue as long as the property with which they are associated survives. The change in classification does not alter the situation with respect to such records other than to afford a logical opportunity to make corrections which might properly have had earlier attention.

It was stated in connection with properties of more complicated corporate history that the setting up of the new Plant accounts might require a complete inventory of the existing property. Such an inventory need not be made with the refinements some-

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times embodied in appraisals for rate-making purposes. It may be sufficient to itemize the important elements of property, the history of which can be traced, but to avoid similar refinements with respect to the very small units of property and the minor parts of large units which make up a large proportion of the total cost, including poles, wire, meters, power plant piping, substation fittings, conduit, etc.

In preparing such inventories and the costs associated therewith, the recently issued official "List of Retirement Units" provides a guide to refinement which may be found helpful in the future in determining the Plant credits applicable to retirements instead of relying upon special and possibly inaccurate estimates made at the time. The work may also serve as a foundation for the Continuous Inventory program which various companies have adopted or are considering.

Where there has been a series of property acquisitions, it may be worth while to develop a preliminary overall financial picture, working back from the existing Fixed Capital to zero by deductions of annual gross additions. In most cases, existing records are at least sufficient to show the net changes in Fixed Capital from year to year, and if reasonably accurate retirement records are also available the gross property addition can be determined. Through such means the property can be traced back to acquisition dates and the significance of nonphysical elements in purchase prices determined.

If substantial amounts are so disclosed, or are known to exist without such a preliminary analysis, an inventory of existing property of the character already described may be the most economical detailed procedure. In tracing this inventory back to acquisition dates and to zero through work and purchase orders and other records, small units can be dealt with in bulk on the commonly used "first in, first out" principle. This may require some adjustment, although experience shows that the errors resulting from this rule are relatively small, at any rate in the absence of radical changes in price level. The cost of the surviving physical property in the acquired systems at the prices prevailing when originally installed, with estimated allocations when necessary, should be embodied in Account 100.1. The excess of purchase price of physical property over its original cost and any nonphysical balances disclosed by such analysis belongs in Account 100.5 and should remain there as long as values associated with such entries survive.

It is not the purpose of this discussion to indicate definite rules of procedure to be followed in the restatement of Fixed Capital. The wide differences in the history and characteristics of the many properties which are facing this problem make impossible anything more than a general outline of procedure. The importance of this problem in other than the minority of simple cases is deserving of emphasis, as is also the need of thoroughness, accuracy, and promptness if the job is to be completed and filed with the commission by the end of next year.

The personnel requirements of this reclassification work are beyond those of routine accounting, and even the skilled fixed capital accountant may encounter many problems outside the

Items Not Found in Fixed Capital

"MANY substitutions and substantial modifications of other kinds of property have been made from time to time and have not found their way into fixed capital records. In the early years, also, many fixed capital entries covering incidental additions to property included only the material involved, other cost elements such as labor, administration, and incidental expenses having been recorded elsewhere."

scope of his experience, particularly where inventories and price level studies are concerned. An engineer, from his knowledge of construction methods and costs and his appraisal experience, is better qualified to determine whether or not existing accounting records completely and accurately reflect the work which they are intended to cover. He may detect important omissions of material, labor, supervision, interest, or other items which necessarily entered into the actual cost of the project.

AN engineering approach is also needed to determine the usefulness of old inventories or appraisals, engineering reports, and other documents bearing upon the history of the company or its acquisitions, in breakdown lump-sum construction or purchase contracts, and supporting the permanence of nonphysical elements of value. In connection with such studies, attention should also be given to the advisability of developing a permanent Plant Records Department, distinct from the regular accounting organization, to relieve that organization of a large part of its vastly increased accounting requirements.

The objective of this whole procedure with respect to Fixed Capital accounts is to distribute them equitably among the various groups of prescribed new accounts, including physical and nonphysical items. Particular attention should be given to Accounts 100.5 and 107, which include certain intangible elements. Account 100.5 should contain payments made for existing and prospective business and other intangible values associated with acquired property, and the excess of the purchase price of surviving physical property over its actual original cost, but not necessarily the excess over the cost recorded on the seller's books. Likewise, Account 107 should include write-ups as a result of valuations of property constructed by the present owner unless they were for the purpose of determining original cost when records of it were not available or were known to be inaccurate.

WHEN the entire job of setting up new Plant accounts has been completed, the results in detail must be submitted to the regulatory commission, paralleled as far as possible by a

detailed statement of prior Fixed Capital, with appropriate explanations as to the procedure followed in the translation. In most cases the work will probably not then be finished, for the scrutiny of the commission may disclose features requiring discussion and possibly formal hearings. If an incomplete or superficial analysis is submitted for approval, it is to be expected that it will be returned for correction and amplification, perhaps with instructions relating to certain refinements or features which may add materially to the final cost of the job.

The extent to which the new system will be adopted for intrastate accounting is still unknown. Some of the scheduled adoptions will not be effective until 1938. Furthermore, the scope of the jurisdiction of the Federal Power Commission has not yet been definitely determined. Where the interstate operations of a large power system are relatively very small, the accounting control over the entire system may be questioned. It is doubtful, however, if such questions will arise in many cases because of actual or prospective adoption of the new system by the state commissions otherwise having jurisdiction.

BECAUSE of the magnitude of the task and the time required for its complete and accurate solution, all electric and gas companies will find it to their advantage promptly to determine the extent, if any, to which they will be subject to this new accounting program through action of state commissions, Federal Power Commission, or the Federal agency which will probably be authorized in the near future to regulate interstate gas operations. It should be further emphasized that the results of reclassification or restatement of older Fixed Capital are not transient but will continue in effect so long as the new system remains as a factor in our expanding system of regulation. The significance of this whole discussion centers in the need of a sound and consistent foundation on which to build a new fixed capital structure.

Did the Power Trust Take Edison for a Ride?

"POWER" (the recent WPA Theatre project) shows Thomas Edison (who looks not unlike Mr. Swope of General Electric) besieged by business men in checked trousers and fancy vests, who want to exploit his electric light commercially. We have heard the story from Mr. Edison's own lips and we do not recall that he was besieged by anybody. Sound business men of the day thought him slightly touched in the head and he had a devil of a time getting started. I am sure the government of that day wouldn't have taken his invention as a gift and wouldn't have known what to do with it if they had. Government ownership couldn't have started with Mr. Edison.

—EXCERPT FROM REVIEW BY ARTHUR W. PARK, *Editor, Public Service Magazine.*

What Price Flood Control?

Ill-advised and wasteful projects such as the TVA program can, in the opinion of the author, only work harm to the country and the taxpayer as a precedent for large expenditures to obtain relatively insignificant results.

By FRANK M. PATTERSON

THE Tennessee Valley Authority has announced a program, now under way, calling for the erection of high dams on the Tennessee river and its tributaries at an ultimate cost of $330,000,000 for flood control and the improvement of navigation on the main stream, with electric power as a by-product. This is a fairly large order, even in these days of ambitious plans, and if it is to be justified it must demonstrate benefits commensurate with the investment and operating costs. No allocation of funds is made for the various objectives and this, in the opinion of TVA, will furnish a yardstick for measuring the efficiency and rates of the privately owned utilities.

Ordinarily it would be difficult for the outsider to make such an allocation; but here it is easy, for the records of the Chief of Engineers of the United States Army and of the Interstate Commerce Commission show that with an investment of $14,000,000 to June 30, 1930, for navigation on the Tennessee river, the average cost per ton-mile chargeable to interest at 4 per cent on the capital cost, plus maintenance and operating expenses of the improvements, was 2.22 cents, compared with the average ton-mile revenue of 1.06 cents for the Class I railways in the same year for a complete carrier service.

The record shows that the traffic for a few years prior to 1930 was substantially the same as in that year and that in subsequent years it was much smaller, with a large increase in the ton-mile cost. If a study of the sources of tonnage indicated that further improvements would add greatly to the traffic, which it does not, additional investment might be warranted; but it is plain that it would only increase the waste that already has occurred.

THUS it will be seen that the expense of the TVA works must be borne entirely by flood control. Interest

on the investment at 4 per cent will entail a charge of $13,200,000 annually and to be economically feasible the dams must prevent an average annual loss of more than that amount, since the cost of maintenance and operation is not taken into account. The writer can find nothing in the government records to show that such a saving can be made; on the contrary, the information he has been able to glean proves that it cannot be.

The protection afforded will be confined to the Tennessee river and the 50-mile portion of the Ohio river from Paducah, Kentucky, to the junction with the Mississippi, 2 miles below Cairo, Illinois. Paducah suffered heavy losses during the Ohio flood of January and February last and the entire city of 35,000 residents had to be evacuated. No reliable estimate of the damage is available, but it is fair to say that it would have been much greater if the Tennessee had been in flood. The flood stage—stage when river is bank full—is 43 feet, while the crest in February was 60.75 feet, comparing with the previous record stage of 54.3 feet in 1913.

CAIRO is protected from the Ohio river by a concrete wall built to a peak stage of 60 feet, extending from the high embankment of the Illinois Central Railroad, which serves as a levee for the easterly side of the city, to a junction with the Mississippi river levee, built to withstand a crest of 62 feet and which can be raised 2 or 3 feet by sandbags. The property loss in 1937 was not heavy, but the city was evacuated when it was feared that the flood would overtop the wall despite the temporary addition of 3 feet by a wooden box filled with earth. The 1937 crest was 59.6 feet and would have been higher but for the opening of the Bird's Point to New Madrid floodway on the westerly side of the Mississippi below Cairo, a part of the government's $300,000,000 flood control program for the Lower Mississippi which proved its worth by also averting threatened damage to levees in the vicinity of Hickman, Kentucky.

Metropolis, population 5,000, and Brookport, population 1,100, on the Illinois side near Paducah, were partially overflowed but the loss was not great. Mound City, with a population of 2,800 and located on low ground a few miles above Cairo, suffered heavily from the breaking of a levee.

IN 1930 Congress approved a project for navigation on the Tennessee at a cost of $135,000,000. This has been superseded by TVA and need not concern us now except as it may refer to flood control. The following excerpts have been taken from the report of the Chief of Engineers to the Secretary of War (House Document 328, 71st Congress, Second Session) on which the project was based:

> Floods occur frequently on the main stream and on the lower part of most of the tributaries. The damage done is not great, but the flood of 1926 caused damage estimated at $2,650,000. The district engineer states that still larger floods are possible and that a flood of the magnitude that might be expected to occur once in 500 years would do damage amounting to $14,000,000. Including damages from such future floods, he estimates the average damage from floods at $1,780,000 annually. . . . The only place at which large damages are concentrated in a limited area is at Chattanooga.
>
> The operation of storage reservoirs on the Tennessee river for the primary purpose of restricting floods on the Mississippi river would have no marked effect on plans for flood control there, but would seriously in-

jure the power possibilities of the Tennessee basin. If the reservoirs were operated for the primary purpose of power in the Tennessee basin their effect on Mississippi river floods would be negligible.

Excepting the hypothetical flood to be expected once in 500 years, these quotations confirm the inferences the writer had drawn from other sources. The engineer must give due weight to all reasonable possibilities and probabilities, but there are limits beyond which he must not go if his findings are to be of value. This suppositious flood has left that boundary far behind and is a weak support for large expenditures on its account.

COMMENTING on Norris dam, the TVA annual report for 1935 says:

> The average direct flood damage between Norris dam and Wilson dam has been estimated by the Corps of Engineers in three separate studies at from $846,320 to $926,413. Most of the damage occurs at Chattanooga. The large amount of flood storage provided by Norris dam, which greatly increases the cost of the program, will prevent at least half of the present average flood damage. The average annual reduction in flood damage at Chattanooga is estimated by the Corps of Engineers at $391,700.

Since the government's records show that the dam will contribute no economic value to navigation, the only legitimate reason for its existence must be for flood control, resulting in an outlay of $35,000,000, plus the cost of maintenance and operation, to prevent less than half a million dollars loss by floods each year. It doesn't seem a good investment.

Concerning electric power the report offers the following:

> The third major part of the Authority program arises from the necessity for disposing of the surplus power generated at Wilson dam and other dams under construction by the Authority. Congress laid down a definite policy to govern the Authority in disposing of this surplus power. . . . Congress also provided that in the sale of electricity public agencies, states, counties, municipalities, and coöperative associations were to be given priority. . . . Existing privately owned utilities have been given every consideration consistent with the Authority's paramount obligations. No duplicating or competitive facilities have been erected by the Authority.

This last sentence is ingenuous and while it may have been technically true on June 30, 1935, it is misleading, for TVA was then installing facilities which can find markets for their full output only in competition with privately owned plants.

AT this point several questions suggest themselves concerning the TVA program for spending $330,000,000 ostensibly for navigation and flood control on the Tennessee river. They may be stated thus:

1. Will the resulting benefits justify the costs incurred for flood control and will the high dams always function as intended?

2. Assuming that the program will

¶ "IF *the dates of transition between wet and dry seasons were constant the periods for storing water for flood control could be set by the calendar and the plan would work to perfection. But the records show that heavy floods have occurred on the Tennessee at times when the storage reservoirs might reasonably be expected to be almost full in anticipation of the low water seasons.*"

prevent the losses cited, could not equal protection be afforded by other means at lower costs?

3. Should the government bear all the costs for flood control on our rivers or should they be divided between that body, the states traversed or affected by the streams, and the cities or owners of property subject to inundation?

4. In view of the information available from the government's reports, does it not appear that the primary purpose of the dams is to generate electricity and thus obtain a synthetic yardstick which evades important elements of cost inescapable by private industry?

The estimates of average annual flood damage on the Tennessee appear high in view of data on high waters at Chattanooga, found in the government publication of 1936, *Floods in the United States,* by Clarence S. Jarvis and others, in collaboration with the Water Planning Committee and the Mississippi Valley Committee.

IF we accept the estimate of average flood damages on the main river at the quoted $1,780,000, we should still have to add such damages as might occur at Paducah and on the Ohio between Paducah and Cairo occasioned by flood waters from the Tennessee to obtain the total chargeable to that stream. We have seen that Cairo withstood a crest of 59.6 feet and it could be protected against a peak stage at a liberal estimate of $100,000. Placing the annual damage from Tennessee river floods at the high figures of $100,000 at Paducah and of $100,000 for the Ohio river below Paducah gives a total of $2,080,000 to be saved by an investment of $330,000,000, whose annual interest costs will exceed the savings by more than $11,000,000. This is on the assumption that the dams will function as intended; it may be expected that they will not do so at all times.

A pamphlet issued by TVA in 1935 gives the following information on the proposed operations at Norris dam:

> Norris dam is primarily a storage dam. Wilson dam (at Muscle Shoals) and Wheeler dam (16 miles above Wilson dam) are run-of-the-river dams. When the river is high much power can be produced at Wilson and Wheeler. When the river is low little power is available. On the other hand, Norris dam with its enormous reservoir can store a year's rainfall from several thousand square miles. So these and future dams will be connected with transmission lines.
>
> During the wet season when there is abundant power at the run-of-the-river dams the Norris plant will be shut down and the water stored. During the dry season that water will be let out.

THE Tennessee river is formed by the confluence of the French Broad and Little Pigeon rivers a few miles above Knoxville and nearly 200 miles above Chattanooga. Their headwaters are in North Carolina. Clinch river, on which Norris dam is located, rises in West Virginia and enters the Tennessee about half way between Knoxville and Chattanooga, while the Hiwassee, rising in Georgia and with tributaries in North Carolina, reaches the Tennessee about 50 miles above Chattanooga. These rivers, traversing a mountainous region where the runoff from rains or melting snow is rapid, are the principal streams tributary to the Tennessee above Chattanooga. The total drainage area upstream from Chattanooga is 21,400 square miles.

If the dates of transition between wet and dry seasons were constant the periods for storing water for flood control could be set by the calendar and

Flood Control Projects to Control Yardstick

"THE huge projected expenditures by TVA and the meager results forecast for flood control arouse the suspicion that the plan is only a scheme to reduce the investment for electric production, with consequent savings in interest and taxes chargeable to that account, in order that the yardstick may give the desired answer."

the plan would work to perfection. But the records show that heavy floods have occurred on the Tennessee at times when the storage reservoirs might be expected to be almost full in anticipation of the low water seasons.

Statistics in *Floods in the United States* show that in the period 1875 to 1929, inclusive, Chattanooga experienced twenty flood crests ranging from 5.4 feet to 10.5 feet above the flood stage of 33 feet in the months of December to April, inclusive, and that in five years there were two crests above flood stage, separated by intervals of a month to six weeks.

EVIDENCE that the flow cannot always be regulated when most needed is found in an item in *Engineering News-Record* of February 11, 1937, concerning the Ohio river flood. This stated that 40,000 second-feet was being released from the Wheeler and Norris reservoirs in preparation for possible additional floods in the future and that replying to a request from the U. S. Division Engineer at Cincinnati to withhold further release until the floods in the lower Ohio and Mississippi rivers had dropped to safe levels, the Authority wired:

> Release at Wheeler had already been reduced before receipt of your telegram of February 6th and is being held to the minimum practicable. Norris and Wheeler reservoirs were filled until great damage to highways, railways, and towns was imminent, in order to give maximum reduction of flood crest at Paducah. It is necessary now to release water as rapidly as safe so as to be able to handle subsequent flood flows. We estimate water released from Wheeler reaches Paducah in about four days. At present Norris reservoir has only a moderate storage available for local flood control.

Flood control on the Tennessee and at Paducah unquestionably could be provided at less cost than is contemplated in the TVA plan.

A REPORT by the Chief of Engineers dated August 14, 1935, (House Document 306, 74th Congress, 1st Session) gives relevant data on various plans, with estimated costs and benefits, for flood control in the Ohio basin, as shown in the table on page 680, and the following comments from the report:

Plan 1 is based on incidental flood relief by power reservoirs on tributaries above Cincinnati. It is estimated

that plan would reduce annual flood damage of $1,860,000 below Pittsburgh, with two-thirds of the loss at or above Cincinnati, by 48 per cent. The Division Engineer concluded that the plan would require at least fifty years for completion in accordance with power requirements in the region, but that it may become economically feasible at some future time. All of the other plans contemplate storage dams with electric plants.

Plan 2 is primarily for Ohio river flood control and local relief on the tributaries, including the Tennessee and Cumberland valleys. The Division Engineer estimated that the plan would eliminate about 65 per cent of damage on the Ohio river below Pittsburgh, but that benefits at the present time would not justify its adoption.

Plan 2A. The report says that exclusion of dams in the Tennessee and Cumberland basins would reduce cost of Plan 2 by 42 per cent and benefits by 40 per cent and that, as in Plan 2, the benefits would not justify the cost.

THE estimated cost of the dams in the Tennessee valley was placed at $168,435,000, with benefits of $1,176,000 for navigation and $1,668,000 for local flood control. The reservoirs in the Tennessee and Cumberland basins were said to be of only average efficiency owing to lack of coincidence of their floods and those on the Ohio river.

The Division Engineer considered that Plan 2B, ultimately may be worthy when anticipated development of the region occurs.

Plan 3 was considered primarily from the standpoint of further flood relief on the Lower Mississippi. The total annual benefits for the Ohio basin were shown as $6,190,000, with $1,190,000 for the Ohio river below Pittsburgh, leaving $31,330,000 to be charged to the Mississippi river, where the $300,000,000 program now in progress is designed to afford protection without this expense.

The reduction in previous maximum flood stage at Paducah was estimated at 5.5 feet for Plan 1 and 6.0 feet for Plan 2, with from 1.0 to 1.5 feet for the other plans. The reduction at Cairo was given as 6.0 feet for Plan 1 and from 1.5 to 1.8 feet for the others.

These data for the Ohio basin need not concern us here except as they relate to flood damage on the Tennessee; the small benefits of flood control there as compared with the costs; the reliance on electric generation to supply the major part of the benefits, with a frank admission that the demand for power would not absorb the output, and the radical change in government practice recognizing that interest is a legitimate charge against work of this nature.

	Plan 1	Plan 2†	Plan 2B	Plan 3
Investment	$2,000,000,000	$574,566,000	$211,000,000	$625,839,000
Annual charges*	160,000,000	34,470,000	12,700,000	37,520,000
Annual benefits	178,000,000	10,900,000	5,960,000	6,190,000

*Made up of interest on investment at 5 per cent, plus cost of maintenance, operation, overhead, and contingencies.

†Plan 2A is same as Plan 2 except that storage and power dams in Tennessee and Cumberland basins are not included.

All of this raises the question whether the entire cost of flood control should be borne by the government or be divided among that body, the several states, and the cities and property owners affected, in equitable proportions as to responsibility and benefits. Nine states contribute the flood waters of the Ohio, while streams from six states flow into the Tennessee, and this justifies the government in sharing in the cost of protection but hardly warrants its assuming the entire burden, for some of the losses are caused by acts of commission or omission by the states and others by the owners of the property affected.

This may be illustrated by the Miami Conservancy District, formed after the disastrous flood in 1913 on the Miami river in Ohio had caused the death of 360 persons and direct property damage of $66,000,000, with contingent depreciation of $33,000,000 in the value of property if measures were not taken to prevent similar floods in the future. The work was carried through successfully by Dr. Arthur E. Morgan, now chairman of the Tennessee Valley Authority.

The cost of $25,000,000 was financed by a bond issue and the property owners in the district were assessed on the basis of benefits. The flood waters originated wholly within the state and it might well have shared in the cost to the extent that its tax income would be increased—or insured against decrease—by the work, while the government should have paid for such part as the plan would be of value in reducing floods on the Ohio river.

The government should pay nothing for the protection of any property below bank-full stages, or in full for any below crests reached in the distant past where no protection has been provided. Before the full development of our railways and the decline of river traffic water transportation was of prime importance, and factories, warehouses, and stores were built close to the river bank, as were the railways reaching these sources of business, where the advantages compensated for the occasional loss by overflow.

The huge projected expenditures by TVA and the meager results forecast for flood control arouse the suspicion that the plan is only a scheme to reduce the investment for electric production, with consequent savings in interest and taxes chargeable to that account, in order that the yardstick may give the desired answer.

Flood control is an important national problem and the increased interest of the last few years will be intensified by the recent flood on the Ohio river. A comprehensive plan will cost billions of dollars and will be a great temptation to "pork-barrel" politicians. For that reason the plans must be coördinated and authorized only after careful estimates of costs and benefits, with allocation of these items on a fair basis among the nation, the states, and the property receiving protection. Ill-advised and wasteful projects such as the TVA program can only work harm to the country and the taxpayer as a precedent for excessive expenditures to obtain relatively insignificant results.

Why the Public Receives Outstanding Utility Service

Intelligent planning, constant vigilance, and coöperation of management and company employees required to give customers what they want when they want it.

By HOWARD F. WEEKS

CONTINUITY of service is more than an ideal of the public utility business. Literally, it is a part of what the company sells to the customer. It is considered as a definite obligation, and the customer not only expects the company to fulfil it, but today he takes it for granted to the extent of being grieved and shocked when there is a failure. While the average customer probably never thought about it in this way, "continuous service" is a condition of sale in so far as the purchase of public utility service is concerned.

Mr. and Mrs. Smith were awakened at 3 o'clock the other morning, when Baby Smith developed an acute stomach ache. One sleepy-eyed parent went to the kitchen, turned on the gas, heated the water, and soon the baby was contented. There is certainly nothing unusual about this. It happens every night in hundreds of homes. But if the gas weren't there . . . then what?

Or take the case of the Jones family. They went to the movies last night and wanted a "midnight snack" before going to bed. The gas was turned on, and no one gave it a thought. That is, no one in the Jones family did. But there was plenty of thought given to it elsewhere, and plenty of effort by men and machines. Customers want service *when they want it*, and the company must render a grade of service that will enable many Jones families and many Smith families to indulge in midnight meals or to care for ailing children at any hour of the day or night.

Obviously, service to satisfy such exacting demands on the part of all customers doesn't just happen. The complete story behind continuous service amounts virtually to a detailed description of the workings of every

major department in the utility company, of how these departments work together at all times to see that there is always a little more of the product available than all the customers require.

PRECAUTIONS taken by Consolidated Edison Company of New York, for example, to insure an uninterrupted supply of gas start at the plants. First there is sufficient capacity to produce all the fuel the customers want. Customer demand may fall below 70,000,000 cubic feet a day in the summer, and it may rise to nearly 200,000,000 a day in the winter, but the capacity of the manufacturing plants must be sufficient to care for the greatest demand. Company policy also requires an adequate supply of raw materials on hand at all times. More than a hundred days' supply of coal for coke oven use is kept on hand in New York, as well as at least a three months' supply of coke for water gas production. Oil requirements in gas manufacture frequently amount to 600,000 gallons a day, and therefore the company has storage facilities for more than 10,000,000 gallons of enriching oil. Strikes at mines or wells and temporary delays in shipping and delivery mean nothing to the gas customer in the city. The possibility of such emergencies affecting the supply of gas is remote indeed—because of company planning.

Even in the case of the supply of water needed at the plants, the company has hedged against unforeseen trouble. New York's water system is considered one of the greatest engineering feats in the world, but Consolidated Edison has facilities for storing a million gallon reserve of water at both the Hunts Point and the Astoria plants, to care for any critical situation which might arise.

EVEN the plants are located and planned with the idea of continuous service in mind. In the case of Consolidated Edison, sufficient standby gas generating equipment is maintained to care for breakdowns and all necessary maintenance work.

Moreover, part of the reserve plant capacity is available during the late fall and early winter at very short notice. The special precautions taken by Consolidated Edison at the Ravenswood plant in Long Island City are extremely interesting. During November the system gas sendout is increasing gradually, and the major plants approach their capacity. The output of the Ravenswood plant ordinarily is not necessary until cold weather sets in, but, New York weather being what it is, oftentimes the gas production facilities of Ravenswood are needed in a hurry. During the latter part of October, one generator house at Ravenswood is made ready for operation. Boilers are started up, and all of the hydraulic lines are filled. To keep them from freezing, space heaters are adjusted to maintain a temperature of 40 degrees. A special waterproof paper is used to seal all openings, including ventilators and windows. Even the stacks are sealed with covers to keep air circulation at a minimum.

BRIEFLY, from the first of November on this plant is maintained so that gas can be manufactured within three hours. It may be early in December when weather reports indicate the approach of a cold snap and the need for more gas. But Ravenswood is

Good Service Taken for Granted

"TODAY mechanical perfection is accepted and expected. A person buying an automobile expects that it will give him good service. He takes it for granted, just as he takes it for granted that his utility service will be perfect. For this very reason, no thought is ever given to what makes this perfect service possible."

ready with eight water gas sets to start supplying 30,000,000 cubic feet of gas a day in less than three hours after the warning from the weather department.

A complete labor schedule is worked out in October, including a temporary arrangement for the first twenty-four hours of operation, and a permanent set-up for after that. The men required know about it well in advance, and they know to what jobs they have been assigned. It takes only a short time to notify them and get them to Ravenswood. The insulating paper is stripped off, the men go about their jobs as if the plant had been operating all summer, and the company is able to care for the increased demand for gas because of the cold weather.

As far as the plants are concerned, at every point—from coal pile to purifying section — there are guards against every sort of emergency.

THE same could be said of the company's distribution system. Of course, the gas business has an advantage over its sister utility, the electric business, in that its product can be stored in advance of use, but the gas holders must be located at strategic points in the territory, and there must be constant supervision to see that district pressures are kept within certain carefully defined limits. In Consolidated Edison System there are forty-four telemetric gauges, by means of which it is possible to check the pressures at various points in the distribution system, no matter how distant from the plants or the gas dispatcher's desk, and to correct any variation.

Long before the twentieth century the company's engineers planned a system of transfer mains which would make the gas storage capacity of any holder station available for distribution in any part of the company's territory. According to F. L. Collins' book, "The History of the Consolidated Gas Company," "the construction of these transfer mains was begun in 1886, and the system was completed in its basic features some ten years later." The history continues with the statement that: "Wise planning of this system of mains is evidenced by the fact that it has always been susceptible of extension to meet any conditions, and no reconstruction of the original piping has ever been necessary because of faulty planning." The history states that New York city was the first city in the world to be equipped with such a complete and extensive system of transfer mains.

It would be possible to continue this enumeration of important precautions taken by the company to insure continuity of service, but the result would be a complete recital of every step in the process of making and delivering gas.

However, there is one other phase—that of man power—which is quite as important as the mechanical side. It goes without saying that effort and money have been invested in training and maintaining a large corps of employees, capable not only of handling the physical work involved, but also of comprehending the significance and necessity for rendering a continuous service.

It is vital to have a labor supply which is easily transferable—possibly from routine work at Point A to emergency work at Point B. It is just as important to have skilled men—who have been trained in advance to handle all phases of any work to which they may be assigned. Persons familiar with the seriousness of this problem appreciate the possibility of being overmanned. Sometimes it might be easier to have too many people than too few. But here again careful planning has resulted in economy of operation without in any way affecting continuity of the service. The matter of service calls supplies an example:

Gas refrigerator service calls reach a peak in the summer. In order to care for these—and to render prompt and efficient service to all—men who have been exchanging meters or doing other routine work are immediately transferred to the more important task at the moment. They have been trained in refrigerator service work and are always available to supplement the regular service force when the occasion arises. By having labor forces which are easily transferable and adequately trained, the company can function efficiently and economically at all times.

While this article does not attempt to cover comprehensively every major step a utility takes to make sure its customers always get the service they require, perhaps enough has been pointed out to show that it is a matter which is part and parcel of utility service. And it probably always will be—even if the customer is not fully conscious of it.

Of course, in this day and age, public utility service *must* be continuous! Mr. and Mrs. Average Family live a complicated existence—and they actually depend on a continuous and dependable utility service much more than they realize. The apartment dweller doesn't give a thought to his gas supply as long as he can go to the kitchen, turn a valve, and get the heat to fry an egg or broil a steak. But if he goes to the range and nothing happens, just what can he do to fry that egg? He has no other fuel supply available. The same applies to the electric light—or to the gas or electric refrigerator. The modern mode of living is geared to a one hundred per cent utility service, and when it falls short of this, things just stop.

The matter of house heating by gas is an outstanding example of the manner in which the public utility assumes this obligation of continuous service. When a customer installs automatic gas heat, he depends entirely on the gas company for his heating

requirements. In all probability the customer never looks at it in this light, unless something goes wrong. Regardless of demand, the company simply must supply heat for his home.

The same applies to electricity. In New York city a sudden summer thunder storm may jump the demand for current one hundred per cent. Or a big prize fight may cause a heavy increase for an hour or two. The company must be geared up to meet the sudden, unprecedented demand. Whether or not it is a thunder storm or a boxing spectacle which causes the peak, the company must give one hundred per cent service because the customer has no other means for lighting, no other means for elevator service, or for the multitude of services which electricity performs for him. The customer doesn't care why there is a peak demand—he may not even know there is a peak demand—all he wants is service for his own requirements!

Today mechanical perfection is accepted and expected. A person buying an automobile expects that it will give him good service. He takes it for granted, just as he takes it for granted that his utility service will be perfect. For this very reason, no thought is ever given to what makes this perfect service possible. There is no thought of the vigilance and planning necessary—of the perfect coöperation that must exist. The customer gets what he wants when he wants it—and that is all that matters.

And They Say It's the Talk of the Town!

"UP in a big window at the telephone company building (in San Francisco) the firm has installed a gimmick (for the benefit of the uninitiated, a 'gimmick' is the handle, or gauge, that fits on to a gadget) which measures the number of telephone calls bounding about the atmosphere at any given moment.

"You can stand there with your nose rubbing on the plate glass by the hour—and many do—and learn exactly how many calls are going and coming through the Garfield, Douglas, Sutter, Exbrook, and Informational Central exchanges at any hour of the day or night. It is the closest thing city dwellers have to the old-fashioned party line, and if phone company engineers can only perfect a system of loud speakers that will broadcast the conversation they'll really have something, as they say in Hollywood.

"Don't ask how the hootenany works. (A 'hootenany' is something like a 'gimmick,' only it's a little thicker.) For as sure as you do, Lyle M. Brown, division manager of the company, or some gent with a pair of pliers in his pocket will start to throw ergs and ohms and B.T.U.'s and cosines at you, and the first thing you know you'll be all crossed up like a knock-kneed ski jumper.

"Just take their words for it. When the whiffle-bar (which is the needle that goes on a 'hootenany') goes 'way up it means that lots pipple are using their telephones. When it sags down, down, like the lettuce in a Third street combination salad the folks are laying off the phones and getting a little work done. That's all you have to know to be an expert gimmick-engineer and stand all day in front of 430 Bush street with the rest of the unemployed."

—WILLIS O'BRIEN,
In The San Francisco Chronicle.

Financial News and Comment

By OWEN ELY

Market Awaits President's Utility Message

DESPITE the fine showing made by recent earnings reports (see table on page 692), utility stocks have advanced only slightly from recent low levels. Presumably Wall Street is awaiting the text of the President's message to Congress, which will outline proposals for "coördination" of various government power projects. Meanwhile the House Rivers and Harbors Committee is delaying final action on legislation for the administration of Bonneville, which has become a red-hot political issue in Oregon. Difficulties regarding Boulder dam contracts may also be clarified by the President's proposals.

It is thought that the message will outline a "permanent" policy for the administration of TVA, Boulder dam, Parker dam, Grand Coulee, Bonneville, and possibly smaller developments.

Senator Norris is expected to introduce a bill shortly calling for the establishment of eight new "little TVA" projects (probably in the Ohio valley, Missouri valley, Arkansas river valley, Colorado river valley, etc.), and the President may also include these in his message, despite financing difficulties.

The utility industry remains vitally interested in the ultimate outcome of the "yardstick" rate idea. While court decisions have slowed down its application in the TVA area, the new book, "Pyramids of Power," by an Administration official, reveals little change of heart by the Administration. The President's message may indicate to what extent the Administration is willing to go, with the support of funds drawn from taxpayers, to sell government power in certain areas at rates below real production costs.

The new trend in Congress toward economy should prevent revival of the ambitious "Quoddy" and St. Lawrence plans. A recent report by Chairman Frank Walsh of the New York Power Authority urged state action on the latter project.

The recent advance in wages in the bituminous coal industry may increase operating expenses some one per cent or more, and together with other increased costs may tend to restrict further gains in net; but on the other hand, a large amount of the refunding and merger program remains to be completed, with resulting substantial savings in capital charges.

Another factor which serves to retard interest in utility securities is the ease with which new taxes are imposed upon the industry. For example, the New York state legislature recently passed the Buckley bill, calling for a 2 per cent tax on gross income of all utilities in the state, for the fiscal year beginning July 1st.

FOR the moment, the constitutional issue remains in the background. The Electric Bond and Share Company will carry its test of the Public Utility Act of 1935 to the Supreme Court, and it hopes for a final ruling on the entire act, not merely on the question of registra-

tion. The case will probably be argued and settled at the next term of the Supreme Court beginning in October. In reserve is United Gas Improvement's case, unlikely to reach the court for some time; other suits are apparently dormant, or have been dropped due to registration. Systems which have now registered or acquiesced in the registration feature (reserving constitutional rights) include North American Company, American Water Works, Northern States Power, Standard Gas & Electric, and United Light & Power.

It is doubtful whether the industry has been reassured by the recent suggestion of SEC member Robert E. Healy that there is nothing in the Utility Act looking toward nationalization or destruction of the power industry. Efficient administration of the act, in his view, should improve the investment quality of the securities of operating companies and should "wrench the predatory type of holding company away from the jugular vein of operating companies."

The following from the *New York Journal of Commerce* presents a more optimistic viewpoint:

> The outlook for the utility industry appears to have undergone considerable improvement as a result of recent developments. The economy drive of the Administration is expected to make the Government much less eager to lend money to municipalities for the construction of competitive plants, and recent ballots on municipal ownership have been favorable to the companies in most instances. The reaction in commodity prices has allayed fears that operating costs would be seriously increased. On the other hand, the general rise in the cost of materials and construction gives the power companies a much better standing in rate cases, so that there should be some relaxation of the pressure for lower rates.

Financial Aspect of Recent Volume

ASIDE from its own merits as an analysis of the New Deal's power policy, the new book, "Pyramids of Power," by M. L. Ramsay, director of the REA Utilization and Research Division is not without some significance to the financial world which is watching and awaiting the outcome of the Administration's program in this respect. Mr. Ramsay carries the power issue to Utopian heights characteristic of the best Tugwellian philosophy. Any such mundane topics as taxes, budgetary deficits, power *vs.* navigation costs, unprofitable government projects, are relegated to the background. The "social use of power" is given a sanctimonious setting as a cornerstone of "the more abundant life." "Roosevelt is determined to make power almost infinitely cheap, as well as all but infinitely abundant," the government official says. "Those who talked with him most about electricity say that he would like, if he could, to give it away, as water is given away to all who come with their jugs at the public fountains of Spanish squares."

Mr. Ramsay has used the most approved method of pushing the Administration's policy—that of raking up past scandal in the promotion of holding companies now reorganized or nonexistent. Financial misdeeds of certain promoters again serve to place the entire private utility industry in a sinister profit-seeking rôle, in contrast to the beneficent Administration policy of free power for all. The private companies' place in the "new scheme of things . . . depends quite largely upon the industry's own attitude upon how far it is ready to help build the power age." Apparently thus far the companies have done little to develop a "power age," but they will perhaps be tolerated if they fall in line.

New York State 2 Per Cent Tax

THE recently-enacted New York state law imposes a tax of 2 per cent on gross revenues of all utilities within the state. While the New York city tax of 3 per cent on gross expires July 1st, the new act provides that a tax

of one per cent (in addition to the state tax) may be levied by municipalities during the coming fiscal year, so that the burden on New York city utilities appears likely to remain fixed at 3 per cent. It is possible, of course, that many other municipalities will also avail themselves of the new taxing power.

Leading companies to be affected by the taxes are New York Telephone Company (which previously paid only on revenues obtained in New York city), Long Island Lighting, Central Hudson Gas & Electric, Associated Gas & Electric, and Niagara Hudson Power Corporation. The latter system, whose operations are entirely within the state, may lose anywhere from $1,500,000 to $2,500,000, depending upon the trend of this year's revenues and the number of municipalities which impose the 1 per cent tax. Assuming that the total annual tax might average 2½ per cent on revenues about the same as last year's, or at the annual rate of some $2,000,000, the tax paid during the second half of the calendar year 1937 would amount to about 10 cents per share. However, the loss would probably not fully offset anticipated savings from the merger and refunding program, when completed; and, due to the new tax, the company may be able to reduce the amount of future rate reductions which it is understood will accompany the merger program.

SEC Seeks Power over Bond Indentures

THE SEC would be given increased regulatory powers over the provisions of bond indentures, and also over trustees, under a new bill introduced in the Senate. The bill, which the commission requested Assistant Floor Leader Barkley to sponsor, is the result of over a year's study. It is said to provide minimum standards for all indentures and specific qualifications for all trustees. While details of the bill are not yet available, some idea of its scope may be obtained from a statement made by the commission nearly a year ago:

> We conclude that it is necessary in the public interest and for the protection of investors (1) that the trustees under these indentures be disqualified from acting or serving if they have or acquire conflicting interest incompatible or inconsistent with their fiduciary obligations; and (2) that they be transformed into active trustees with the obligation to exercise that degree of care and diligence which the law attaches to such high fiduciary position.

The commission holds that "there should be carried over into the corporate field the standards of fiduciary relationship which have long obtained in personal trustees and with which these professional trustees have had a long and rich experience."

The SEC already possesses certain powers under § 19 of the Securities Exchange Act of 1934 to deal with indentures, in connection with listing requirements of new issues. But if new securities are not listed, they avoid such regulations. Therefore, the SEC seeks broader and more definite functions, implemented as usual by Federal power to regulate the mail and interstate commerce.

Natural Gas Companies

THE outlook for the natural gas industry remains quite favorable, while the manufacturing gas companies are apparently losing ground slightly. The entire industry was, of course, affected by the abnormally mild winter but sales of gas for industrial purposes reflect steady improvement, and the recent sales campaign on gas appliances is expected to increase domestic consumption. There may be some offsetting losses in domestic use of current due to switching from gas to electric kitchen ranges; sales of the latter are expected to be quite large this year.

February sales of gas total $79,699,000,000, nearly 4 per cent under last year, while revenues showed a dip of 1.4 per cent. The gain of over 8 per cent in industrial-commercial consumption

was insufficient to offset the drop in domestic uses.

Plans for the introduction of natural gas to New Jersey and the New York city metropolitan district, which some years ago seemed imminent, have apparently made little progress, but various projects in the Middle West, such as the Panhandle Pipe Line, have been carried to completion, increasing the outlet for mid-continent and Gulf fields.

There has been some question whether the Appalachian field holds enough gas to supply New York, Philadelphia, Baltimore, and industrial New Jersey; based on a potential use of 100,000,000,000 cubic feet annually, the life of the field has been estimated at only nineteen years. It would, therefore, be necessary to make definite plans for eventually supplying gas from the mid-continent fields, and uncertainties regarding costs are probably responsible for the delay in bringing gas to the Atlantic seaboard.

Commonwealth & Southern

THE magazine *Fortune,* in typical breezy and popular style, devotes some twenty-two pages of its May issue to a description of the Commonwealth & Southern System and President Willkie—with sidelights on TVA, the theory of holding companies, etc. A 2-page colored map shows the service areas of the fourteen "biggest sellers of electricity" (Associated Gas, Consolidated Edison, Commonwealth Edison, Commonwealth & Southern, Detroit Edison, Electric Bond & Share, International Hydro-Electric, Middle West, Niagara Hudson Power, North American, Pacific Gas & Electric, Public Service Corp. of N. J., Standard Gas & Electric, and United Gas Improvement).

Commonwealth's creation and its activities in coördinating the system are described as follows:

> To begin with, the three intermediate holding companies were immediately dissolved, and while $55,000,000 of Penn-Ohio and of Southeastern funded debt was taken over, no new bonds or debentures were issued. Nor was the general public offered a chance to buy more than 130,000 of the 1,500,000 shares of $6 preferred. Most of C. & S.'s original capital—$45,000,000 in fact—was raised by the sale of 11 per cent of the common stock to a preferred list, whom Mr. Willkie has referred to as "the inside boys," and who paid around $20 a share for it. The bulk of the common and preferred was exchanged for the stock of the three previous companies.
>
> Many engineering economies were effected from the start. The Tennessee company, formerly owned by Commonwealth, was of course integrated with the southern group. Mr. Cobb also integrated the Ohio plants, bought Columbus Electric & Power in Georgia to consolidate it with Georgia Power, added other contiguous properties in Illinois and Michigan. The beauty of such integration is of course that you save generating equipment. C. & S. figures that by virtue of the interconnections of all transmission lines in the South, the kilowatt capacity of these companies is some 15 per cent greater than it would be if they were separate, and it evaluates the extra power at $2,000,000 a year.
>
> The new holding company also embarked on a program of simplification that has reduced the total number of corporations in the system from 165 to sixty and has vested all the electric and gas operations in a single company in each state. But the primary function of a holding company is to get capital for its subsidiaries, and it is at this task that the C. & S. policy shines most beneficently. By way of stuffing the cushion under each company's funded debt, and to help some of them make the acquisitions mentioned above, C. & S. has increased its investment in the common stock of its subsidiaries—all of which it owned from the start—by $97,000,000, either in cash or in reductions of the senior issues. Two-thirds of this investment has gone into the common of the southern companies, whose structures were rather moister than those of the North and whose bonds had declined to around 60 and 70. C. & S. has also advanced the southern companies some $30,000,000 in loans. And when it makes a loan C. & S. acts more like a rich uncle than a banker. When Central Illinois Light borrowed $9,300,000 in a high money market about four years ago with bonds at 90, C. & S. held the bonds for two years and finally sold them at 97¼, at a lower interest rate. The $700,000 saving was given back to Illinois Light. Similarly with Georgia, which will be able to thank the patient vigilance of Vice President Jacob Hekma, C. & S.'s finance head, for the cash benefit of a rise in its bonds from 97 to 104. During the past three years C. & S. has also done more refunding of its

subsidiaries' obligations than any other utility system in the country—$267,000,000 for the northern companies alone, at an annual saving in interest and dividends of $3,500,000. Which helps to explain why C. & S. has its offices in Wall Street, 480 miles from its nearest operating company, and why the operating companies seem to like to belong to C. & S.

Fortune tests Commonwealth's record with respect to certain bad habits of holding companies — "loading the rate base," "upstream" loans, and "gouging on fees"—and gives the company a clean bill of health on each.

The Tennessee Valley Electric Power Company has recently filed application with the public service commission of Tennessee for authority to issue $1,500,000 bonds for construction of a steam plant to replace power formerly purchased from TVA. The latter has refused to discontinue its invasion of the company's territory, hence the company prefers to produce its own power, and no compromise has yet been effected.

Corporate News

THE principal subsidiaries of the Bell Telephone System reported a net gain of 108,000 telephones in service during April, compared with a net gain of 75,400 in April last year. The company hopes before the end of the year to recover all the depression drop in telephones, which amounted to nearly 2,500,000 or about 16 per cent. About 85 per cent of the lost ground has already been recovered. Mr. Gifford at the annual stockholders' meeting indicated the probability that sometime in the future the company would resume stock financing through issuance of rights (it is, however, in no immediate need of cash, having over $150,000,000 on hand). There has recently been some renewed investment interest in American Telephone stock.

Leading telegraph companies have sharply reduced night letter rates, the annual reduction amounting to some $3,000,000. This appears to be a belated response to the reductions in long-distance telephone rates. The FCC is continuing its investigation of telegraph rate structures.

Peoples Gas Light & Coke Company has filed a new appraisal, increasing its property value for rate purposes about $9,783,849, in connection with the hearings before the state commission.

The Commercial National Bank & Trust Co., after fifty-six consecutive adjournments over the past five years, has "bought in" at auction the blocks of stock in Peoples Gas, Commonwealth Edison, and Public Service Co. of Northern Illinois formerly held by Insull Utility Investments, Inc., and pledged under loans from the bank.

UNDER a court order the revised reorganization plan of Philadelphia Rapid Transit Company will be submitted "forthwith" to the city of Philadelphia as well as to the state utility commission, prior to submission to security holders and creditors.

North American Gas & Electric Company is preparing certificates for $764,000 of 6 per cent cumulative income debentures, due 1949, and 82,400 shares of common stock for distribution to unsecured creditors of the predecessor holding company, as provided for in the approved amended plan of reorganization, now declared effective by the SEC.

The Illinois Power & Light Corporation, indirect subsidiary of North American Company, has been authorized by the SEC to proceed with its reorganization plan and exchange of securities.

New York Telephone Company has called for redemption its $25,000,000 6½ per cent preferred stock at $110 a share and accumulated dividends. Because of the wide distribution of the stock among subscribers, employees, and other small holders (although in recent years holdings have become somewhat more concentrated), redemption was unexpected. The price range this year prior to the announcement had been 119½–115. The stock continues to sell 1½ points above the redemption price.

RECENT EARNINGS STATEMENTS

	No. of Months Included	End of Period	System Earnings per Share (a) Last Period	Previous Period	Per cent Increase	Per cent Decrease
Electric & Gas						
Amer. Gas & Elec.	Twelve	Feb. 28 (d)	$2.21	$1.90	16%	..
Amer. Power & Lt.	"	Dec. 31	0.25	D 0.71	..	..
Amer. Water Works	"	Mar. 31 (c)	1.62	1.40	16	..
Boston Edison	"	Mar. 31 (c)	8.69	9.20	..	6%
Cities Service	Three	Mar. 31	0.11	0.09	22	..
Columbia Gas & El.	Twelve	Mar. 31 (c)	0.40 (h)	0.54	..	26
Commonwealth Edison	Three	Mar. 31	2.77	1.89	46	..
Commonwealth & So.	Twelve	Mar. 31 (d)	0.16	0.03	..	..
Consol. Edison, N. Y.	"	Mar. 31 (c)	2.48	1.90	30	..
Cons. Gas of Balto.	Three	Mar. 31	1.35	1.37	..	2
Detroit Edison	Twelve	Mar. 31	8.33	8.26	1	..
Elec. Pr. & Light	"	Dec. 31	0.93	D 1.39	..	..
Federal Lt. & Tract.	"	Dec. 31 (c)	2.61	2.24	17	..
Intl. Hydro-El. ("A")	"	Mar. 31 (c)	1.11	0.21	425	..
Long Is. Lighting	"	Mar. 31 (c)	0.22	0.26	..	15
Middle West Corp.	"	Dec. 31	0.58	(e)	..	..
National Pr. & Lt.	"	Nov. 30	1.00	0.79	26	..
Niagara Hudson Power	"	Mar. 31 (c)	0.83	...	..	..
North American Co.	"	Mar. 31	1.89	1.45	30	..
No. States Pr. of Del. (Pfd.)	"	Jan. 31	6.61	6.27	6	..
Pacific Gas & Elec.	"	Dec. 31	2.55	2.46	4	..
Peoples Gas, Lt. & Coke	Three	Mar. 31	1.72	1.14	50	..
Pub. Ser. Corp. N. J.	Twelve	Mar. 31 (d)	2.74	2.43	13	..
Pub. Ser. Co. of Northern Ill.	"	Mar. 31 (c)	4.75	3.83	24	..
South. Calif. Edison	Three	Mar. 31	0.47 (f)	0.46 (f)	2	..
Stan. Gas. & El. (Pr. Pfd.)	Twelve	Feb. 28	9.33	6.66	40	..
Stone & Webster	"	Dec. 31	0.87	0.04	..	..
United Gas Improvement	"	Mar. 31 (c)	1.11	1.07	4	..
United Lt. & Pr. ("A")	"	Feb. 28	0.35	D 0.20	..	..
Utilities Pr. & Lt. ("A")	"	Sept. 30	D 1.80	D 0.87	..	..
Gas Companies						
Amer. Lt. & Traction (b)	"	Dec. 31	1.68	1.33	26	..
Arkansas Nat. Gas.	Nine	Sept. 30 (c)	0.36	0.08	..	..
Brklyn. Union Gas	Twelve	Mar. 31 (c)	3.20	3.40	..	6
Lone Star Gas	"	Mar. 31 (c)	0.97	0.94	3	..
Pacific Lighting	"	Mar. 31	4.71	4.22	12	..
United Gas Corp.	"	Dec. 31	0.30	D 0.56	..	..
Telephone & Telegraph						
Amer. Tel. & Tel.	"	Feb. 28 (c)	10.28	7.44	38	..
General Telephone	"	Mar. 31 (c)	1.71	1.52	12	..
Western Union Tel.	"	Mar. 31 (c)	7.34	5.76	27	..
Traction, etc.						
Bklyn.-Man. Transit	Eight	Feb. 28 (d)	2.89	2.54	14	..
Greyhound Corp.	Twelve	Dec. 31	1.51	1.18	28	..
Hudson & Man. (Pfd.)	Three	Mar. 31	D 2.61	D 1.53	..	..
Twin City Rap. Tr.	"	Mar. 31	0.93	1.17	..	20
Systems Outside U. S.						
Amer. & For. Power (Pfd.)	Twelve	Dec. 31	6.02	4.15	45	..
Intl. Tel. & Tel.	"	Dec. 31	0.62 (g)	0.40	55	..
Montreal Lt., Ht. & Power	"	Dec. 31	1.75	1.75	..	..

D—Deficit.

(a) On common stock, unless otherwise indicated following name of company.
(b) Total sales about 72 per cent gas.
(c) Report also published for quarter ending same period.
(d) Report also published for month ending same period.
(e) Not reported.
(f) Parent company only.
(g) Preliminary.
(h) Estimate.

What Others Think

Will Reorganized Federal Commissions Mean Better Regulation?

So much time and attention inside and outside of Congress have been focused on President Roosevelt's proposal to reorganize the Federal judiciary that correspondingly little consideration seems to be given to the President's message of January 12th, transmitting a Report on the Reorganization of the Executive Departments of the Government.

A number of the recommendations of this report seem to have been more or less anticipated by the "Washington observers," including: (1) the proposal to extend the merit system and establish a career service; (2) the proposal to increase the number of cabinet departments and to realign among them the responsibilities for various borderline bureaus. It was also expected that the report would discuss the subject of the Comptroller General and the so-called independent regulatory commissions; but few expected that the President's committee would go as far as it did in its recommendations as to both.

The present administration's quarrel with the Comptroller General's office seems to be an official family affair and whether Congress will agree to strip that official of his powers of independent preauditing of government expenditures is not particularly a matter of concern to those primarily interested in utility regulation. The same might be said of the proposal to reorganize the White House staff to delegate the burdens of the Chief Executive to six superefficient anonymities. That also would seem to be an intra-administrative fight to which the public is not invited, nor particularly interested in.

Not so, however, with the proposal to fit each independent regulatory commission into an appropriate cabinet department, and to segregate its duties into administrative and judicial functions. The administrative section, under the proposed plan, would be directed by a bureau chieftain of the parent cabinet department and serviced with a staff having Civil Service status. The surviving remnant of the commissions, stripped of their staffs, and containing only bare membership plus necessary amanuenses, would continue as independent specialized appellate tribunals.

Such a change, of course, would go to the very heart of the rapidly expanding field of Federal regulation starting with the dean of all Federal commissions, the Interstate Commerce Commission, and proceeding down to the baby in this family—the U. S. Maritime Commission. It would include, among others, such important organizations as the Federal Power Commission, the Federal Communications Commission, the Securities and Exchange Commission, and the Federal Trade Commission.

The reasons given by the President's committee for such a drastic proposal are serious and numerous. To summarize: Congress is charged with haphazard development of these independent commissions without "consistent policy," as compared with similar congressional delegation of regulatory functions to regular departments (such as the stockyard regulation under the Secretary of Agriculture). The Federal commissions themselves are criticized as being a "headless fourth branch of the government" answerable to nobody but the courts for a combination of judicial, legislative, and administrative duties

that they have performed in such a fashion as to become more like "irresponsible agencies" than "independent" ones. In short, they are said to "enjoy power without responsibility," and by the same token "leave the President with responsibility without power." Finally, the Federal commission setup is condemned as inequitably uniting in the same offices the duties of judges, prosecutors, and juries.

Dr. Lindsay Rogers, professor of public law at Columbia University, writes, in the *Political Science Quarterly*, a very sympathetic analysis of the President's plan. He states in part:

> Apart from economies which might result from such a division of functions—presumably within a particular department certain personnel might be used jointly for two commissions—certain other consequences would seem likely. The attention of the members of the commissions could be centered entirely on their *quasi* judicial work. They would no longer be bothered by administrative problems. On the other hand, the President would not be handicapped, as he is at the present time, in stirring a commission to life and in assisting on greater activity by its administrative or prosecuting staff.
>
> In its *Report* the President's committee outlines its proposal in general terms. It is not dogmatic in maintaining that the same medicine should be administered in a dose of the same size to each of the regulatory commissions. The principle of the plan would "not have to be applied with exact uniformity to every commission." After administrative and judicial sections were under the same roof, details could be worked out experimentally. "The precise division of labor between them could also be readily modified in the light of experience, and the shifting of a function from one section to the other would not raise the major jurisdictional controversies that sometimes result from proposals to alter the status or duties of an independent commission."
>
> Of necessity the *Report* could make no extended argument, in support of the recommendation, either by analysis of function or by analogy. Nondetailed mention is made of the fact that for thirty years the regular departments have had regulatory powers which do not differ in kind from the functions handed over to the commissions. One specific illustration is given: "the powers of the Secretary of Agriculture under the Packers and Stockyards Act are essentially the same in nature and importance as those of the regulatory commissions." There are twenty similar laws.

THE Patent Office, Veterans' Administration, and Treasury Department are also mentioned as agencies which have successfully set up within themselves appellate bodies, judicial in varying degree, for reviewing administrative orders similar to the British "Ministerial Courts." Neither the President's committee nor Professor Rogers, however, refers especially to the regulation of maritime affairs which only a few months ago was taken away from the Department of Commerce and lodged in the new U. S. Maritime Commission because, in the opinion of Congress, Federal regulation in the maritime field was definitely unsatisfactory. All of which might indicate that the same formula does not necessarily work every time.

In this connection, however, it is interesting to note Professor Rogers' reference to the legislative permutations of the Workmen's Compensation Act in New York state. He speaks with authority about this because he was appointed in 1928 under the Moreland Act (which authorizes the governor of that state to create a special official to investigate management of state functions) to look into complaints made against the general operation of the Workmen's Compensation Act. Professor Rogers confesses that what he at first mistook to be statutory deficiency, turned out to be deficiencies in personnel. So maybe all that the old U. S. Shipping Board needed was a shake-up. However, Congress thought otherwise in 1936.

As to the New York Workmen's Compensation Act which Professor Rogers selects as a sort of miniature model of the regulatory commission problem, it seems that in 1914 the administration of the act was lodged entirely in a commission of five members, which was absolutely independent of the state department of labor. In 1921, the purely administrative features of the act were placed under the state department of labor and *quasi* legislative and judicial

The Detroit News

THE WALRUS AND THE CARPENTER

powers were transferred to an Industrial Board. This worked well for awhile until 1928 when the governor was, as stated before, moved by complaints to investigate and the Rogers report thereon recommended that the independent "Industrial Board be given administrative as well as judicial control over the Bureau of Workmen's Compensation and its staff." But now Professor Rogers admits that "this analysis of the situation was superficial and the recommendation was unjustified."

As proof of his second judgment, he goes on to recall that sometime later Miss Frances Perkins was placed in charge of the state department of labor and after that everything began to work fine, indicating that the trouble was not with the statute but the preceding official who had the duty of administering it. For this reason, as well as those mentioned in the President's committee report, Professor Rogers now finds himself in favor of direct administrative responsibility.

Professor Rogers is not impressed with the importance of (nor apparently the court's reasoning in) Humphreys' Executor *v.* United States (1935) 295 U. S. 602, 79 L. ed. 1611, wherein it was decided that the President of the United States could not remove a member of the Federal Trade Commission without cause and his analysis of this decision betrays a somewhat partisan flavor. The Rogers article stated in part:

> No "institutional consequences" are to be expected from the Humphrey Case. It is

a *secret de Polichinelle* that President Roosevelt considered following the statute and laying down "causes" for the removal of Mr. Humphrey. His legal advisers were wrong in guessing that the gentler course of removal without the cause being stated was covered by the Myers Case (upholding the President's removal of a Postmaster without cause). They did not know that a Chief Justice who narrowly missed occupying the White House would differ from a Chief Justice (Taft, who decided the Myers Case) who had lived there. If "inefficiency" or "neglect of duty" had been alleged and the President had then removed, the court, without an unpalatably drastic reversal of the cases, would not have reviewed the question of whether the President had "proved" his charges. In other words, the President could have stated his case against Mr. Humphrey as provided by the statute and, after a hearing, could have removed him. He has the same opportunities in respect of other members of the protected commissions. The Myers Case was taken advantage of only once. The Humphrey Case will not put Presidents in straitjackets.

Professor Rogers concedes, however, that there is no need for haste in the reorganization of the Federal regulatory bodies. He states:

> Manifestly there should be no precipitate action to give effect to the recommendation of the President's committee. Indeed, the committee seems more concerned about the future than about the present. It insists on no mixture of functions in the future. It hopes that existing mixtures may be unmixed. If Congress should give the President authority by executive order to attach certain commissions to appropriate departments, he would act only after careful consideration and in the face of strong pressures not to act at all. I suggest that he act only after a *quasi* judicial inquiry into the precise nature of the mixture of legislative, administrative, *quasi* judicial, and judicial powers possessed by each commission. Such an inquiry could be *ad hoc*, so that piecemeal action could be speedy. This would have many beneficial results.
>
> The methods of such an inquiry, I suggest, should be modeled on the methods of the Committee on Ministers' Powers which five years ago reported on a similar problem in Great Britain. Under its terms of reference, the Committee on Ministers' Powers was "to consider the powers exercised by or under the direction of (or by persons or bodies appointed specially by) Ministers of the Crown by way of (a) delegated legislation and (b) judicial or *quasi* judicial decision." As is well known, the occasion for the appointment of the committee was the public discussion and uneasiness which followed the publication of Lord Hewart's *The New Despotism*, in which, as Felix Frankfurter remarked, the Lord Chief Justice descended from the bench and made a stump speech.

PROFESSOR Rogers labors a bit to show that conditions in our present Federal setup are quite different than those in England, doubtless to avoid the natural suggestion that we might well adopt the findings of "The Report of the Committee on Ministers' Powers" (Vol. III, No. 3, *The Political Quarterly*, 351 (1932) which hardly moved in the direction of greater administrative control. But at any rate he assures us that such an impartial and comprehensive inquiry would be of the greatest value if only from the viewpoint of technical education in Federal political science, and surely few would quarrel with that objective.

Interesting in passing is the brief discussion of the reorganization plan given by the general solicitor for the NARUC, John E. Benton, who writes in one of the periodical bulletins to his associate members in part as follows:

> Plainly if this plan is adopted we shall no longer have, for example, the Interstate Commerce Commission as we now know it, although the section composed of commissioners may be so denominated. We shall have two units. The commissioners can no longer originate regulatory policies or determine what investigations shall be made or how they shall be conducted, or what evidence shall be brought into the record. All that will be done by the administrative bureau, which will exercise all of the powers of the present commission, except only the decision of cases by the judicial section, upon records presented to that section by the administrative bureau. In view of the volume of work which must be done, the administrative bureau will "in the first instance decide the case and issue orders." From these orders appeals may be taken to the commissioners, upon which they will act in a purely judicial capacity upon the records presented to them. In effect, seemingly, the commissioners will thus take the place of the commerce court, created during the Taft administration, but shortly abolished; and the commission will be left to function under the direction of the President, through a member of his Cabinet.

WHAT OTHERS THINK

IN a somewhat opposite direction from that taken by the President's committee was the recommendation of a special committee of the American Bar Association for a Federal administrative court. This report, which has been too widely discussed to warrant further description at this time, would have the judicial functions of the regulatory commissions shifted to a special Federal tribunal—a full-fledged ranking district court and as such more independent of the Chief Executive than ever. Colonel O. R. McGuire, chairman of the American Bar Association committee on administrative law, explained one reason for this recommendation as follows:

> Closely allied to this situation is the complete inability of the citizen to obtain any authoritative decision as to the rule which will be followed in the administration of particular statutes as they are applied to given states of facts. Take for instance the Robinson-Patman Act which was passed at the last Congress to regulate certain trade practices and where it is of the utmost importance that the business man and his lawyer know in advance what rule will be applied to given states of facts. There is no machinery for obtaining such an authoritative interpretation in advance; the citizen must take a chance that his proposed procedure is correct and be mulcted by a fine with possible imprisonment, under some statutes, if he should be wrong. Why can't we face this situation in a common sense manner and provide that application may be made to a trained tribunal for a ruling in the nature of a declaratory judgment which will protect the citizen until the rule is authoritatively changed? The trial and error method has not been a success in the enforcement of the Interstate Commerce Commission Act, the Federal Trade Commission Act, the Packers and Stockyards Act, the Pure Food and Drug Act, the Immigration laws, or in fact any of our regulatory statutes—any more than such trial and error method has been a success in the enforcement of the Internal Revenue and Custom Acts. We must not only have control by law but we must have an improved technique if the rights of the citizens are to be adequately protected and at the same time sufficient flexibility be left in the administration of the laws so that they can be administered, assuming their constitutionality which might well continue to be tested out in the constitutional courts.

However, while the President's committee and the American Bar Association Committee may differ widely upon the setup of tribunals for special review of administrative and regulatory work, in a broader sense they seem to meet about on common ground, although approaching the problem from different directions. The President's committee, taking the administrative approach, would strip the independent commissions of their staffs, leaving them hanging in mid-air, so to speak, to function as "independent" appellate boards. The Bar committee taking the judicial approach would gather up all these special appellate boards and roll them into one grand Federal administrative court. Either way, it looks like tough sledding ahead for the prevailing independent Federal regulatory commission "as we know it."

—F. X. W.

THE INDEPENDENT REGULATORY COMMISSIONS. By Lindsay Rogers. *Political Science Quarterly*. March, 1937.

BULLETIN No. 7. National Association of Railroad and Utilities Commissioners. Washington, D. C. January 13, 1937.

SAILING CLOSE TO THE WIND, OR THE NEED FOR A FEDERAL ADMINISTRATIVE COURT. By Colonel O. R. McGuire. *American Bar Association Journal*. December, 1936.

MESSAGE of the President of the United States transmitting a Report on Reorganization of the Executive Departments of the Government. January 12, 1937. Senate Document No. 8, 75th Congress, 1st Session.

Stimulating Residential Consumption by "Objective" Rates

BEFORE the Federal government originated its famous "yardstick" rate, two important utility companies had already developed scientific plans for reducing residential electric rates—known respectively as the "Washington" plan

Indianapolis News

LOSING PATIENCE

and the "objective" plan. The former was originated by Potomac Edison at Washington, D. C. (affiliated with the North American system), and the latter by Alabama Power Company, subsidiary of Commonwealth & Southern Corporation.

William F. Kennedy, a member of Professor Bonbright's seminar in public utilities at Columbia University, has written an interesting 83-page analysis of the "objective" plan, now published in book form through the coöperation of the Commonwealth & Southern Corporation.

The "Washington" plan permits automatic rate adjustments as profits increase, while the "objective" plan benefits customers who increase their consumption

over that of some previous period (generally the twelve months preceding the adoption of the plan). As Mr. Kennedy states:

> The most valuable contribution of the objective rate plan is that it makes possible the offering of rate reductions that otherwise could not be granted, because by protecting existing revenues it does not expose the company to the financial dangers of an outright rate reduction. This feature has added importance when economic conditions are uncertain. There will probably be a widespread use of the objective rate plan in the next few years because it is the most practicable method of offering rate reductions when the condition of the company is not overprosperous or when the economic outlook is uncertain.

Promotional rates for electricity have been gradually introduced along with the increased use of appliances during the past decade—particularly the heavy-current-consuming refrigerators, electric ranges, and water heaters. Political obstacles were encountered in early attempts to introduce promotional rates. Some seventy-five per cent of residential bills reflect the use of only 40 kilowatt hours or less, and state commissions have been solicitous for the welfare of the small consumer. Hence it was difficult properly to adjust rates to a promotional basis unless small consumers paid their full share of the overhead cost. The "optional" rate method for use of appliances did not solve the problem, since the small consumer was still billed at an unprofitable rate and large consumers had to make up the loss. Moreover, the rates were too complex and difficult for customers to understand. Special rates for heating and cooking also proved unsuccessful, being generally rejected by the commissions as discriminatory and overly complicated.

THE depression cut down the industrial use of electricity, leaving utilities with surplus output. The "objective" plan proposed by the Commonwealth & Southern Corporation in 1933 permitted the offering of this current to consumers at decreased rates while protecting existing revenues. This was done by providing two separate schedules effective at the same time—the immediate rate and the objective rate. Whenever a consumer's bill under the immediate rate exceeds the "base bill" (his bill based on the same rate, for the same month of the base period), indicating increased use of current, the bill is refigured on the basis of the "objective" rate. (However, if the "objective" rate results in a bill less than the "base bill" the "base bill" applies.) For example, a consumer of 100 kilowatt hours would pay $4.58, or a rate of 4.58 cents; but he could obtain 150 additional kilowatt hours at a rate of only 1.33 cents, thus offering great inducements to increased consumption.

Following Commonwealth & Southern's inauguration of the "objective" rate in 1933 several other types of "bargain rates" were introduced in 1934. Mr. Kennedy concludes that experiments made by other companies have proved less popular than the "objective" plan, which as of January 1st had been adopted by some 56 companies.

While it is difficult to appraise the results obtained, figures for the Alabama Power Company, Georgia Power Company, and Tennessee Electric Power Company indicate that average consumption has risen to over 1,000 kilowatt hours annually, compared with a national average of 688 in the year ending April 30, 1936.

It is impossible briefly to summarize the large amount of statistical data and technical analysis contained in the study. Mr. Kennedy has made a valuable contribution to the rate question—one which may profitably be studied by government experts as well as by utility executives.

—O. E.

THE OBJECTIVE RATE PLAN. By William F. Kennedy. 83 pages. Columbia University Press. $1.25.

Is the State Compact Coming or Going?

It will be some time before the collegiate law review experts decide whether the recent decisions of the U. S. Supreme Court in the Wagner Labor law cases have elevated the much debated state compact to a more commanding position, or have relegated it to that state of happy obscurity which Governor Cleveland used to call "innocuous desuetude."

At first blush it would seem that if the Federal government can itself regulate labor conditions on a national scale there would be correspondingly less need for similar state action and *a fortiori*, for state compact action. But a second look at this proposition raises considerable doubt as to the validity of both premise and conclusion.

First of all, the Supreme Court has not said that the Federal government may directly regulate wages, hours, etc., in all industries, whether engaged directly in the clear channel of interstate commerce or in those tributaries to the channel which "essentially affect" the flow thereof. (Neither for that matter has Congress enacted such a statute, although for purposes of argument we may assume that it would if it could validly do so.) All the Supreme Court decided in the Wagner Act cases was the rule that the Federal interest in peaceful labor relations is sufficient to warrant its direct regulation to the extent of protecting, by official mediation, the employees' right to collective bargaining if they so elect. This doctrine certainly moves in the direction of wage and hour regulation, but it is still quite a distance from that goal.

Students of utility case law will recall in this connection the implied distinction to be noted in comparing a certain line of Supreme Court decisions beginning perhaps in 1931 with O'Gorman & Young *v.* Hartford Fire Insurance Co. 282 U. S. 251, 75 L. ed. 324. Prior to that time the orthodox legal view seemed to be that there was a definite demarcation (arbitrarily perhaps, but clear cut, nevertheless, by court fiat) between those businesses "charged with a public interest" and those which were not. If it were such a public business, it could be constitutionally subjected to the whole gamut of utility regulation—rates, service, security issues, etc. If it were held otherwise (as in the theater ticket case, Tyson & Bro.—United Theater Ticket Offices *v.* Banton (1927), 273 U. S. 418, 71 L. ed. 718) the government had no constitutional authority to impose special regulation on the particular business in question.

With the O'Gorman Case, however, the court recognized definitely a principle that had been very unobtrusively suggested back in 1914 by the late Mr. Justice McKenna's opinion in German Alliance Insurance Co. *v.* Lewis, 233 U. S. 389, 58 L. ed. 1011, namely, that there may be certain businesses so organized that one aspect of their operations could and should be regulated by the government while other aspects should be left to private management — half charged with a public interest, so to speak. Taking insurance for an example, public interest may well warrant the regulation of rates and discrimination in rates, but could insurance companies be obliged to serve (*i.e.* to issue a policy to) every member of the public willing to pay a premium, just as the routine utility is obliged to serve all comers? Probably not. To do so would interfere with a very definite managerial discretion that runs to the heart of the insurable risk. If insurance companies could be forced to issue a policy to anybody who applied for one, it is very doubtful if many would care to remain in the business.

It was a recognition of this concept of partial or restricted utility status which led this writer in 1932 to make a formal distinction between public utilities as such and "business affected with public interest." [1] This concept occasioned some

[1] "Cases on Public Utility Regulation." By Francis X. Welch (1st ed.) Public Utilities Reports, Inc., Washington, D. C. 1932. P. 9 *et seq.*

comment and question among the teaching profession at the time. However, only two years later, Mr. Justice Roberts, writing the court's majority opinion in Nebbia *v.* New York, 291 U. S. 502, 2 P. U. R. (N.S.) 337, stated in part:

> We may as well say at once that the dairy industry is not, in the accepted sense of the phrase, a public utility. We think the appellant is also right in asserting that there is in this case no suggestion of any monopoly or monopolistic practice. It goes without saying that those engaged in the business are in no way dependent upon public grants or franchises for the privilege of conducting their activities. But if, as must be conceded, the industry is subject to regulation in the public interest, what constitutional principle bars the state from correcting existing maladjustments by legislation touching prices? We think there is no such principle.

THIS is mentioned here only for the purpose of emphasizing the court's more recent tendency to approve — as constitutional—partial government regulation of certain businesses. Is it not possible, therefore, that the court in the Wagner Act cases has set the limit (for the present at least) to which the Federal government can go in regulating labor relations of private industries? In other words, the Federal government may have enough interest in preventing obstructions to interstate commerce to require that employers allow their workers to bargain collectively, but not sufficient interest — under its interstate commerce powers — to regulate labor relations in detail (such as prescribing wages, hours, etc.).

On the other hand, it will be recalled that the Supreme Court, by reversing its previous position, recently upheld the authority of the states to do that very thing in the Washington minimum wage case. Assuming for argument, therefore, that the Federal government cannot go so far, whereas the states may, it follows that the state compact may be in a fair way to become an effective and popular supplement to the more general powers of the Federal government over interstate commerce.

But there is yet another manner in which the state compact may become an effective supplement to Federal regulation in the light of the Wagner Act cases; that is in the matter of picking up local regulation where Federal regulation leaves off. Obviously, the Wagner Act cases extend Federal regulation beyond the old concept of interstate commerce to embrace local industrial processes which are vital links in the broader chain of interstate commerce. Equally obvious, however, is the probability that those businesses which are wholly intrastate in all phases of their operation do not fall under the Federal power. In other words, the old NRA which sought to have the Federal government fix wages for every drug clerk, housemaid, or cobbler's apprentice, is still invalid and the Schechter Case is still the law of the land.

HERE is opportunity then for the states, if they so desire, to pick up where Federal regulation leaves off and round out the regulatory picture. To do this successfully some uniformity, or at least some understanding, between states would be necessary and that would mean the state compact. For if an industry paying employees an average wage of $25 under Wisconsin law, let us say, must compete in the same market with a rival concern paying only $20 in neighboring Minnesota, the resulting competition would be more unfair perhaps by reason of statutory restraint than the same situation under the present free competitive employment conditions. The state compact would be almost necessary to prevent state regulation from becoming worse than no regulation.

Incidentally, apropos of the probable effect of the Wagner Labor Act cases on public utilities, a recent issue of a weekly Washington utility letter stated:

> Whether the recent ruling of the U. S. Supreme Court in the several Wagner Labor Act cases leaves utility employees, generally, under the control of the National Labor Relations Board is a doubtful question. Obviously those utility services which are inherently interstate (such as transportation, long-distance telephony, and power and gas transmission over state lines) fall immediately under such Federal regulation. On the other hand, gas and electric utilities which

are wholly local may be exempt, while the case of a local telephone exchange predominantly engaged in intrastate business, but with minor interstate toll connections, presents a more puzzling question.

The distinction laid down by Chief Justice Hughes in the steel case is at once broad and vague: "Although activities may be intrastate in character when separately considered, if they have such a close and substantial relation to interstate commerce that their control is essential or appropriate to protect that commerce from burdens and obstructions, Congress cannot be denied the power to exercise that control." (Would a strike in an intrastate electric utility, paralyzing an industrial community, constitute a "burden on interstate commerce?")

In other words, it appears that the old Shreveport principle, by which ICC regulation was extended to intrastate railroad activities "affecting interstate commerce," has now been extended by the court to validate Federal regulation of all industrial labor relations which are essential to the free flow of interstate commerce. An analogy which is doubtless familiar to the electric industry is the FPC insistence that the Federal government's constitutional power to regulate navigable streams extends also to tributaries "to the extent that they substantially affect the flow of navigable streams." So also does the NLRB now have authority over industrial labor disputes not only arising out of the channel of interstate commerce itself, but also out of those "tributaries" which substantially affect the free flow thereof.

COMING back to the subject of state compacts, the reader may wonder why so much emphasis is here laid on labor regulation as if that were the principal problem for which the states might employ the compact device. The answer is that labor regulation and commodity price regulation are the two major objectives for state regulatory action. The Supreme Court, in the Nebbia Case, has sustained state price fixing for "necessary commodities" and, in the Washington minimum wage case, it has sustained state wage regulation. It must reasonably follow that the states may do a number of things collectively along the same line, such as elimination of child labor (notwithstanding the fact that Hammer *v.* Dagenhart has not been avowedly overruled), regulation of prison-made goods, and other matters concerning which there has been some constitutional doubt heretofore.

The recent preliminary report of the United States Chamber of Commerce gives a brief review of the effective use made of the state compact already. It lists more than 60 state compacts which Congress has authorized, not one of which has ever been invalidated by the Supreme Court, although a number have been vigorously attacked in court. Harbor and sanitation improvement in the New York metropolitan area, Boulder dam, interstate criminal extradition, flood control, game protection, petroleum conservation, various agricultural regulations, and even taxation have been the subjects of successful agreements between different states.

THE Chamber report lists the following varied possibilities for state compacts:

Social Legislation: Many problems which exist by reason of provisions of the Federal Social Security Act, and accompanying state legislation as to unemployment benefits for some workers, might be avoided if state compacts were substituted.

Labor Legislation: States desiring such measures could put into effect for themselves salient features of the Federal Labor Relations Act, which appears insecure on any Federal basis and the administration of which as a Federal statute presents problems which in themselves may prove insuperable. It is established that states may prevent night work by women and children, and may deal under some circumstances and reasonably with hours of work for all adults. State regulation of minimum wages for women, however, seems to have been attempted so far in ways which are invalid.

Electric Power: Ten years ago the chairman of the Federal Securities and Exchange Commission, which has jurisdiction under the new Federal public utility act, was joint author of an article in which he proposed compacts as means for regulation of power utilities extending into several states, on the ground that control should be coterminous with such utilities, and taking the position: "National action is either unavailable or excessive. . . . Federal control is wholly outside the present ambit of Federal power, wholly unlikely to be conferred upon the Federal government by constitutional amendment and, in the practical task of government, wholly unsuited to Federal action even if constitutional power were obtained. . . . As to these regional problems Congress could not legislate effectively. Regional in-

terests, regional wisdom, and regional pride must be looked to for solutions."

Milk Production: On the ground that disorganization in production through depression prices endangered an adequate supply of healthful milk for urban communities, the Supreme Court upheld a state law under which minimum prices could be fixed by public authority. As metropolitan areas are usually dependent for their supply of milk upon production in several states, compacts are apparently means for dealing on a uniform basis with the supply for a metropolitan center.

Natural Resources: If there are to be state compacts, as has been contemplated by Congress with respect to production and marketing of tobacco, there would seem no reason why states in which production of bituminous coal is important should not, if they desire, enter into compact carrying out in a practical way such provisions of the invalidated Federal Bituminous Coal Act as they consider desirable. The states concerned might go farther and work out a compact dealing with the present competitive sources of fuel and power. The compact method might be considered for bringing about uniformity of taxation upon timberlands in states where the lumber industry is important, and for bringing into relation areas of timber production in different parts of the country. Through compacts, outstanding questions might be properly solved respecting consideration of resources in water powers and as to boundaries between Federal and state jurisdiction respectively over water powers.

Regulation of Businesses: Each state in which business is done by some enterprises undertakes its own supervision. Insurance companies authorized to do business in several states are of this class. Not engaging in interstate commerce, they cannot in any degree be subjected to centralized Federal control. States might wish to enter into compacts through which they would act together or in a uniform manner.

Corporate Charters: Through compacts, states could arrive at desirable uniformity and restraint, in replacement of some earlier state competition in liberality, as to the powers they grant to corporations created under their laws to do business in other states.

WHILE the Chamber committee did not ostensibly advocate the state compact for any of these varied purposes, obviously the possibility is favorably considered. In a similar vein write Marshall E. Dimock and George C. S. Benson of the respective faculties of Chicago and Michigan universities under the title "Can Interstate Compacts Succeed?" After reviewing the history of the state compact in detail and presenting its advantages and disadvantages these writers state:

> In conclusion, we must point out a very obvious but most important fact—no panacea has been discovered in the interstate-compact idea. It would be overstepping the bounds of its usefulness to suppose that the compact will step in to take care, to any very large extent, of what has hitherto been accomplished by other effective means. But we do believe that the idea will continue to play an increasingly significant rôle in our Federal system.
>
> As a matter of political theory, as one commentator points out, the compact is an ideal compromise with the doctrinal pattern of the Constitution. It offers a technique for satisfying certain generally shared social ambitions without distorting the Federal structure of multiple sovereignty.
>
> It has been seen that the most important questions of interstate concern are beyond court relief. Legislation of continuing effect must of necessity be resorted to, and such legislation, to be useful in regional matters, must be coterminous geographically with the problems requiring control.

They also recognize the necessity for moderation in the use of the compact, observing on this point:

> Of course, too many compacts whose subjects are of relatively trivial importance might result in something approaching chaos.

And so it would seem that when such liberal-minded educators as Professors Dimock and Benson, and a committee of such a comparatively conservative body as the U. S. Chamber of Commerce, agree that the state compact has valuable possibilities, maybe, as the professors put it, "the political prognosis is good." In short, it may be well worth trying.

—F. X. W.

STATE COMPACTS. Preliminary Report presented by the Special Committee on State Compacts to the meeting of the Board of Directors, November 20, 1936. Chamber of Commerce of the United States, Washington, D. C.

CAN INTERSTATE COMPACTS SUCCEED? By Marshall E. Dimock and George C. S. Benson. Public Policy Pamphlet No. 22. The University of Chicago Press, Chicago, Ill. Price 25 cents.

The March of Events

Asks Bonneville Rate Control

THE Federal Power Commission on May 4th recommended that Congress give it full jurisdiction over rates or relieve it of "any responsibility" in connection with the $75,000,000 Bonneville hydroelectric project on the Columbia river. The commission, in a report filed with the House Rivers and Harbors Committee, criticized two bills introduced by Representative Smith of Washington and Representative Honeyman of Oregon for failure to provide clear-cut control over Bonneville rates.

Under both bills the power commission would have power to veto rates, but could not change them. The report said:

"In the opinion of the commission, the divided responsibility as to rates is uneconomical and undesirable in many respects. A single agency should be vested with complete authority and responsibility as to the rates to be charged for electric energy generated at the project and sold to the public. In the first place, the divided responsibility would necessitate duplicate staffs of the administrator and the Federal Power Commission.

"Secondly, the rate procedure described by the bill would result in unnecessary and unjustifiable delay. It would be necessary for the administrator to prepare rate schedules and to submit them to the commission before consideration could be given by the commission to the effects of the proposed rates of the administrator."

The commission said there were no material differences in the bills except that the Smith measure provided for operation of the project by an administrator, appointed by the Secretary of the Interior, while the Honeyman bill would authorize the Secretary of War to administer the navigation phase and the delivery of energy.

The commission disclosed that at the direction of the President it is undertaking studies of data upon which Bonneville rates may be based and asserted that the report to the committee carried the approval of the budget bureau.

Secretary Ickes, appearing on May 10th before the House Rivers and Harbors Committee, urged an "unpartitioned, integrated power development" for the Bonneville dam and opposed both the Smith and Honeyman bills. Mr. Ickes said it was the opinion of the National Power Policy Committee, of which he is also chairman, "that there should be no partition of the government power facilities constructed in connection with the Bonneville project, but that the generation, transmission, and marketing of government power, so far as the same is undertaken by the government, should be under control and direction of one civilian administrator."

Mr. Ickes said the statement implied no reflection on the work of the War Department for, he remarked, the Army Engineers' "primary interest does not lie in the field of power development."

A compromise was suggested by Mr. Ickes to meet the objections voiced by the Federal Power Commission concerning responsibility for rates. He suggested that the committee adopt the Pierce bill, which provides that "if any rate schedule submitted by the administrator is not approved by the Federal Power Commission, the commission may revise such schedule in conformity with the standards prescribed by this act, and as so revised, such schedules shall become effective."

Approves Flood Control Measure

THE House Flood Control Committee on May 10th approved a resolution requiring Army Engineers to submit to Congress a comprehensive national plan for controlling floods on all major rivers.

The committee amended the resolution to include provisions for the construction of levees, spillways, diversion channels, channel rectification and reservoirs, and utilization of water through the erection of power dams or a combination of power, reclamation, conservation, and flood control dams.

Upholds Municipal Competition

ACTION of the district court of the District of Columbia dismissing injunction suits of two electric utility companies in which they sought to restrain allocation of PWA funds to towns in Alabama and Iowa for the construction of municipally owned lighting plants was affirmed by the U. S. Court of Appeals on May 10th.

The Alabama Power Company and the Iowa City Light & Power Company were plaintiffs in the cases which were dismissed on grounds that the utility companies had no exclusive franchises to furnish electricity to the towns involved and it was legal for the towns to compete with the utility companies.

The Iowa City concern is a Delaware corporation but has large transmission and distribution facilities in the state of Iowa. Its suit was to restrain construction of munic-

ipally owned plants in Iowa City, Coralville, and University Heights. The Alabama company had charged a conspiracy between the PWA and the Tennessee Valley Authority to "disrupt and destroy its business, and by unlawful use of public funds to carry into effect the President's announced national power policy."

The court made it plain it did not consider constitutional questions involved but confined itself strictly to a determination as to whether the municipal competition is legal. It stated:

"The fact that in furnishing the funds which will enable the municipalities to engage in such competition, the administrator may have exceeded his authority, or may have acted under an unconstitutional statute does not affect the situation."

Quebec Power Control

PRIVATE power companies in Quebec Province received notice of government intervention and close control over the industry on May 4th when Premier Maurice Duplessis introduced a bill into the legislature for creation of a Provincial Electricity Board.

The 5-man body would have powers to revise contracts and fix rates. Its salaries and contingent expenses would be paid by the power companies. The Union Nationale Premier has already put through a bill allowing municipalities to expropriate private power systems, and he has given notice of a bill to create a Provincial hydroelectric system, starting on a small scale in Temiscamingue. The new bill provides for an organization called "The Provincial Electricity Board" with full power to "control and survey enterprises for production, sale, and distribution of electrical energy in the Province." The bill says:

"Among other powers, the commission has the right to make an inventory of all assets of these enterprises, to make full investigation of their financial structure, their accounting, their receipts, their profits, their expenditures, and all their operations in general.

"It can, furthermore, of its own initiative or on request of an interested party, fix rates for electricity sold in this province, basing them on the valuation of the physical assets of the enterprise and on reasonable costs. In addition, it can modify or even annul any abusive contract for the sale of electrical energy."

All companies in the industry must obtain an operating permit from the commission, and such permits will expire after two years. All contracts of private companies are given a limit of five years' duration, and even existing contracts will be reduced to five years when the law comes into effect.

Municipalities owning their own electrical systems are exempt, and municipalities may avail themselves of the commission's power to revise a contract with a seller or distributor of electricity. If a municipal council fails to request revision, according to the bill, any twenty-five property owners may request such contract revision by the commission.

Asks Utility Inquiry

THE Senate Interstate Commerce Committee on May 3rd urged Congress to authorize a Federal Trade Commission investigation of active power company opposition to public power developments. The committee approved a measure by Senator Norris to give the commission $150,000 for the proposed inquiry.

In a strongly worded report the committee asserted that the investigation was needed to bring out facts on which to base legislation "to stop such widespread hampering of government agencies in the orderly performance of their duties." It said there were "many instances" in which private utility firms "have gone to great lengths to frighten off" farm organizations which might have coöperated with the Rural Electrification Administration in building power lines.

Cuts TVA Budget Request

LOPPING off $2,833,730 in direct money and $1,500,000 in authorization to incur obligations from the budget request for the Tennessee Valley Authority, the House Appropriations Committee late last month reported the second deficiency appropriation bill, recommending $40,166,270 in cash and $4,000,000 in authorized obligations for that agency for the fiscal year 1938.

It was said the committee displayed no hostility to TVA in cutting the budget estimate of $43,000,000 in money and $5,500,000 in authorized obligations, for in the entire bill it reduced budget recommendations for various agencies totaling $98,035,548 by a recommended total of $18,828,605. In other words, it was the hard luck of TVA to have its appropriation considered after the economy wave began.

The budget bureau had recommended $43,000,000 in cash plus authority to contract for $5,500,000 more—a total of $48,500,000—for TVA for the new fiscal year. For the present fiscal year, to expire June 30th, TVA had a direct appropriation of $39,900,000, plus reappropriation of an unexpended balance of $8,790,702 of prior funds, for a total of $48,690,702, of which not to exceed $500,000 will remain unexpended June 30th.

The $4,000,000 obligation authorization contained in the bill as reported was to contract for generating units for the Chickamauga and Guntersville dams.

Besides cutting off $1,500,000 of the authority to obligate for generating equipment to be delivered in the future, the appropriations committee reduced the following cash items recommended by the budget for TVA: $125,428 from general water control investi-

gations; $216,628 for investigations looking toward a dam at Watts Bar; $230,532 for studies at Coulter Shoals, and $382,450 for potential dam studies on tributaries of the Tennessee, these three items being eliminated in their entirety; $3,134,850 from the estimated $38,197,032 for continued construction and work at Guntersville, Chickamauga, Hiwassee, and Pickwick Landing dams and reservoirs, which cut probably can be absorbed through delaying land purchases; $61,600 from the fertilizer and soil conservation program; $25,000 from the national defense program, and $157,242 from the program of regional studies, experiments, and demonstrations.

Budget estimates of $6,895,302 for the electrical program, which includes new transmission lines, substations, etc., and electricity operating expenses were approved without change, as were items to continue explorations for the proposed dam at Gilbertsville, Ky., and work at Wilson, Norris, and Wheeler dams.

Opens Research Department

THE Federal Communications Commission on May 1st announced the establishment of a telephone rate and research department in connection with its $1,500,000 investigation of the American Telephone and Telegraph Company.

The department will be maintained on a temporary basis until June, 1938, when Commissioner Paul A. Walker, of the telephone division, may seek funds to make the agency permanent, it was said.

The A. T. and T. investigation will be concluded next June 30th.

Phone Rates Reduced

THE Southwestern Bell Telephone Company on May 1st announced another voluntary reduction in long-distance rates producing annual savings of $460,000 to telephone users in the territory served by that company, according to S. B. Eversull, general manager for Kansas. Revised schedules were to be filed with the Federal Communications Commission, effective June 1st.

This reduction, the ninth since 1926, will apply only to those interstate calls beyond 42 miles which are handled exclusively over the Southwestern Company lines within the states that company serves, Missouri, Kansas, Oklahoma, Arkansas, and Texas, and a small part of Illinois. With this cut included, annual savings to long-distance users total approximately $5,000,000 a year, Mr. Eversull said.

Alabama

Power Resale Upheld

ALABAMA municipalities owning or operating power plants may resell electricity to coöperative membership associations, Attorney General A. A. Carmichael ruled on April 28th. Also, municipalities buying at wholesale from private utilities may resell their supplies, he ruled.

His opinion was handed down at the request of Gordon Persons, chairman of the Alabama Rural Electrification Authority.

Gas Subject to Tax

DELIVERIES of natural gas from Louisiana fields to points in Alabama and other states do not free it from the application of the Alabama franchise tax of $2 per $1,000 of capital employed in the state, the U. S. Supreme Court ruled recently in the case of the Southern Natural Gas Corporation *vs.* the state of Alabama.

Gas sold purchasers was delivered in continuous movement from the gas fields in Louisiana without break or interruption, the court agreed, but it was unable to conclude that the business was entirely an interstate matter. It also found that the gas company made Birmingham its headquarters for the transaction of business. While Delaware was the state of incorporation, the company's commercial domicile was in Alabama, and as a consequence the tax could be legally collected.

Arkansas

Offers to Supply Co-ops

THE Arkansas Power and Light Company early this month proposed to furnish current and operate rural electrification systems owned by coöperatives for 75 per cent of the gross revenues, leaving 25 per cent for the coöperatives to amortize REA loans obtained to finance construction of their lines. Rural consumers would be charged the same rate as small-town consumers. Coöperatives would bear only the cost of constructing the lines. The power company would supply current, bear all operating expenses and maintain the lines.

The company has agreed to wholesale cur-

rent to coöperatives operating their own systems at a rate 1.23 cents per kilowatt hour, described by Thomas Fitzhugh, state utilities commission chairman, as "the lowest rate offered by any utility in the United States."

Harvey C. Couch, president of the Arkansas Power and Light Company, outlined the proposal—intended to bring about statewide rural electrification—at a meeting called by Governor Bailey and attended by approximately 75 farm leaders. The governor acted as chairman of the meeting, which was held in his reception room at the capitol. Immediately after the session, Governor Bailey telegraphed John M. Carmody, REA administrator, urging release of Federal funds for eight Arkansas projects submitted sometime ago. It had been understood that the loans were being held up on the grounds that proposed wholesale current rates were too high.

Power Rates Lowered

A NEW schedule of rates for electricity which will reduce its cost to Conway consumers by an annual aggregate of $12,000 was approved by the city council in an ordinance passed on April 27th. The new schedule abolishes a meter rental charge which had been producing a revenue of $4,500 a year, provides a combination rate for lights and refrigeration in residence, reduces the initial charge for current for domestic use from 11 cents to 8 cents a kilowatt hour, and makes reductions averaging about 10 per cent in commercial rates. The new rates will become effective on bills rendered June 1st for current consumed during May.

California

Offers to Finance Power System

THE Public Works Administration's $2,760,000 official offer to finance the first units of the All-American Canal hydro power system was received on May 6th at the Imperial Irrigation District headquarters in El Centro. The government has fixed completion date as July 1, 1938. Harold Ickes, as Administrator of Public Works, has approved July 1, 1937, as the date for the starting of construction. Evan T. Hewes, district president, made the announcement.

The irrigation district also had before it the offer of the Nevada-California Electric Corporation to buy from the district all power developed in the All-American Canal hydro-electric plants for the next forty years at a price of $35,000,000. Hewes said the district would proceed with plans for an election to approve government contracts in view of the fact that July 1st had been set by WPA for starting construction of the project.

A. B. West, president of the utilities company, in the letter to the district, outlined the following 4-point program:

The company to buy all firm power generated by the district's canal plans at 5 mills a kilowatt hour, plus 1½ mills for secondary power; the district to apply its $2,760,000 PWA loan to building four power plants, instead of one, and not to construct lines duplicating those of the power company; the company to construct $700,000 in new rural electrification lines; rates for electricity to be based on the cost of power from the plants, with the district reserving such power as maintenance demanded and paying for only the carrying costs on company lines.

Announces Rate Slash

EFFECTIVE June 1st, consumers will benefit to the extent of $120,000 annually through a reduction of gas and electric rates by the Coast Counties Gas and Electric Company, it was announced by the state railroad commission recently following an informal investigation.

The utility serves gas throughout practically all of Contra Costa county and electricity in Santa Cruz, Watsonville, Hollister, Gilroy, and intermediate points.

President Wallace L. Ware stated that the commission engineering force would immediately figure out the spreading of the total reduction between gas and electric utility users.

Florida

Introduces Regulatory Bill

CONSUMERS of electricity and gas in every city in Florida were interested in S. B. No. 429, introduced by Senator Tillman, of Tampa, in the state legislature last month.

The bill delegates to cities and towns and to county commissioners the power to regulate the prices charged consumers for electric power and lights and gas.

The cities would, by ordinance, regulate the rates within the limits of municipalities, and the counties through their boards of county commissioners would have power to regulate

the rates charged consumers residing outside of municipalities. Boards of arbitration are provided for when rates are reduced to a point to which a utility company may object. If the utility company fails or refuses to select its arbitrator after sixty days' notice from a county or a municipality, then the city or county is empowered to fix and regulate the rates to prevent any abuses or overcharges, it was said.

Kentucky

Plant Vote Scheduled

A REPORT of the Somerset city council's light and power committee, recommending that the question of a municipally owned light and power plant be submitted to the voters at the November election, was adopted last month by a vote of 4 to 2.

The city attorney was authorized to prepare the necessary ordinance for calling the election. The report was presented by Councilman L. F. Guffey. Argument in opposition to adoption of the report was made by J. H. Bailey, Pineville, district manager of the Kentucky Utilities Company which now serves Somerset with electric light and power. An effort was made to delay adoption of the report until a committee of Somerset civic clubs could conduct an investigation of the proposal, it was said.

Louisiana

Announces Statewide Investigation

WADE O. Martin on April 30th announced that the state public service commission, of which he is chairman, would conduct a statewide investigation of all public utility firms to determine if any are guilty of alleged discriminatory practices and whether exorbitant rates are being charged.

The announcement was made after Mayor Sam S. Caldwell of Shreveport had appeared before the commission and asked that it conduct a hearing of a complaint filed by him against the Arkansas-Louisiana Gas Company in May, 1936, and assess the costs of the hearing to the utilities firm. Commissioner Martin said that the firm, which now operates under the name of the Arkansas Natural Gas Company, would be investigated along with others in the state, the costs in each case to be assessed to the utility companies involved.

Martin declared that it was known that gas is being piped out of north Louisiana to Atlanta, Ga., a distance of 600 miles, and that it is being sold for both domestic and industrial purposes for less money than in some places in the state of Louisiana.

At a business and executive session held on May 8th, the state commission ordered the secretary to proceed with an "immediate" investigation of "rates, charges, and practices" of all gas and electric utilities in the state subject to its jurisdiction and to "institute proceedings accordingly." It was announced that the firm of Mark Wolff of New York and Chicago, public utility consultant, had been retained to aid in the investigation.

Massachusetts

Labor Represented on Board

ORGANIZED labor would be represented by one member on the state public utilities commission, under the provisions of a bill which was ordered to a third reading by the state senate on May 3rd.

The senate had previously voted to kill the bill, but Senator William P. Grant of Fall River obtained reconsideration by a vote of 18 to 16. The bill had already been ordered to be engrossed by the house.

Appliance Sale Authorized

MUNICIPAL lighting plants were authorized to sell electric and gas appliances under the terms of a bill which was signed April 29th by Governor Hurley, after he had received an opinion from Attorney General Dever that the measure was constitutional, and a report from Chairman Abraham C. Webber of the state department of public utilities that the measure was desirable, it was recently stated.

Missouri

Start Power Move

A NEW move was started recently for municipal control of electric power distribution in St. Charles. Mayor Charles Kansteiner was authorized at a meeting of the city council to appoint a committee to confer with officials of the Union Electric Company relative to the purchase of power at wholesale rates by the city for distribution among its residents.

Councilman Wesley Filling, who started the action, expressed the opinion the project, if consummated, would enable the city to furnish electricity to the residents at rates lower than the existing ones. Councilmen were of the opinion that the proposal, if carried out, would ultimately result in purchase of the equipment of the Union Electric Company in St. Charles by the city.

Residents of St. Charles in 1934 defeated in two special elections proposals for the purchase of an electric power plant by the city. The new move is different, it was said, in that the city would buy the power instead of producing it.

The council also voted to increase occupation licenses of the gas and electric companies from $100 to $200 per year and to raise the license of the Bell Telephone Company from $100 to $500.

New Jersey

Nullifies Plant Vote

FOR the second time the New Jersey Supreme Court on May 5th nullified a referendum of the citizens of Camden authorizing construction of a $10,000,000 municipal light, heat, and power plant, on the ground that the undertaking would cause the city to exceed its legal debt limit.

In November, 1935, the voters approved the proposition by about 4 to 1 and the city commission adopted a resolution ratifying the vote. The Public Service Electric and Gas Company protested, and on May 5th Justice Harry Heher wrote the court's opinion.

There were "obvious reasons," he said, why a referendum could not be voted when a project would run beyond the means of a municipality, because it might result in "baneful consequences to the public interest." The plan was authorized at a referendum in 1933 by about 3 to 1, but the supreme court threw it out because there had not been the proper number of signatures on the petitions. It had come before the court on a writ of certiorari.

Justice Heher held that the legislature was the proper agency to deal with municipal power authority and duty. There are two bills pending in the legislature to amend the debt-limit law to allow municipalities to borrow money for self-liquidating plants beyond the limit now set.

New York

Denounces Transit Verdict

MAYOR La Guardia launched a scathing attack against the transit commission recently for its rejection of the $436,000,000 transit unification plan negotiated and sponsored by Samuel Seabury and City Chamberlain A. A. Berle, Jr. In effect he charged it with "sham," "fraud," and "misrepresentation," and accused it of having "unleashed" its adverse report only after the adjournment of the legislature and with the permission of "the political bosses."

The mayor's accusations were made in a speech broadcast from his desk in City Hall over a radio network of 10 stations. The speech closed with a declaration of his intention to fight until the transit problem was solved. In his outburst against the commission he flatly accused it of having urged the city's negotiators to raise the fare on the rapid transit lines. This charge was denied by members of the commission.

In political circles the mayor's talk was construed as equivalent to an announcement that he would be a candidate for reëlection, with preservation of the 5-cent fare through rapid transit unification as one of his main issues. The peg upon which Mayor La Guardia hung his notice of readiness to go to the polls on the fare issue was said to be a proposal contained in the report of John J. Curtin, special counsel to the transit commission. Mr. Curtin put forward an alternative plan, avowedly "tentative," in which he fixed a price of $321,000,000 for the Interborough, Manhattan, and B.-M.T. properties. Neither the commission nor its individual members commented on the proposal or referred to it in memoranda rejecting the Seabury-Berle plan.

Mayor La Guardia, however, pinned the plan on the commission itself and challenged the

state board to "make good" on the Curtin proposal by September 1st, about two weeks before the September primary elections. He called on the commission to deliver to the board of estimate by that date a plan bearing the approval of traction interests involved.

Ohio

Votes City Light Study

THE Lakewood city council passed a resolution on May 3rd authorizing its public utilities committee to negotiate with Cleveland officials, investigating the feasibility of obtaining light from the Cleveland municipal plant. The resolution said that in case it was discovered the plant lacked the capacity to serve Lakewood, the two cities should consider a plan whereby provision for supplying the suburb would be made when expected improvements to the plant are finished.

It was pointed out that the franchise between Lakewood and the Cleveland Electric Illuminating Company has expired and the city is forced either to renew the franchise or seek electricity for domestic use from some other source. The resolution said the city for many years has been in the embarrassing position of being compelled to accept any rate the company cared to offer.

Council President William H. Fahrenbach, who instigated the action, told the members that Cleveland Utilities Director Frank O. Wallace had informed him that the present size of the light plant would not allow the service but that with expansion it might be possible.

Will Stop Gas Service

THE Northwestern Ohio Natural Gas Company on April 28th notified Toledo city officials that it would cease natural gas service within the city limits on August 2nd. It serves 60,000 homes in that city.

Asked what the natural gas users would do for heating and cooking service, company officials said that they would have to seek some other type of fuel. Artificial gas service will continue. The announcement came after years of discussion on the question of reducing gas rates.

Pennsylvania

Commission Bill Amended

THE Achterman-Ominsky bill which provides the regulations under which the state public utility commission will operate, came out of committee on April 28th for the third time. It was printed and then sent back to the committee where more changes were made.

Many of the two-score amendments submitted would return regulatory powers of municipally owned, or operated utilities to the status they now enjoy under the regulations of the old public service commission, which a companion bill ripped out of office on April 1st.

Harrisburg and other cities objected to the original bill's provisions which would have placed a municipal service company's rates under commission control. The commission, according to amendments, will have power to pass on rates charged in suburban districts by a city-owned water company, for instance, but cannot pass upon the rates charged within a city. The city utility, however, must file its annual report with the commission just as utility corporations do.

Another change provided that the commission may correct inequalities in rates in making permanent findings, if it is found that temporary rates are inequitable to either company or consumer. Under the proposed amendment final rates would act as a form of rebate in the event temporary rates are overestimated.

Two other amendments affecting municipal operations would provide for the commission to check up on service within corporate limits for the purpose of regulating similar service outside the corporations. Three other additions would apply to municipal corporation reports to be filed with the commission.

An additional section would permit the purchase of intercommunicating communication systems instead of lease as at present. Telephone companies would be required to furnish outside connections to such systems under the commission's orders.

Final debate and house vote on the bill were anticipated this month.

Begins Gas Rate Probe

CLAIMING "unjust and unreasonable" rates, the state public utility commission on May 6th notified 104 natural gas companies, including those in Pittsburgh and Allegheny county, that an inquiry into such rates had been instituted. The commission requested that the companies answer not later than June 1st, after which hearings would be scheduled.

Investigation of the rates was instituted by

the commission on its own motion. It was said to be the first inquiry into rates charged by an entire industry in the history of the state. Most of the companies named operate in the western section of the state. The lone exception in the 104 companies named was the Allegheny Gas Company, serving Bradford and Tioga counties.

The companies notified of excessive rates serve approximately 750,000 customers in 30 counties of the state. They were informed that the commission has in its possession "information indicating that rates and charges of natural gas companies for service rendered to Pennsylvania consumers are unjust and unreasonable, and by reason of such information the commission deems a thorough inquiry into such rates and charges advisable in the public interest."

Approves Waterworks Bill

Two bills of major importance to the city of Pittsburgh were recommended to the state senate recently by the senate committee on municipal government. The bills were sponsored by Senator Thomas E. Kilgallen, Pittsburgh Democrat, and reported from committee soon after their introduction. The bills propose: (1) empowering the city to condemn existing privately owned water companies, build new waterworks or to purchase present companies, either within or outside the city limits; (2) empowering city officials to sell bonds to finance acquisition of a waterworks without detracting from the general debt limitations of the city.

The measures would enable the city to purchase or condemn all or part of the South Pittsburgh Water Company, a project frequently proposed in the city council, without stretching the city's present limited bonding capacity, it was said. Previous attempts to separate the city's waterworks debts from the general debt failed, due to adverse court decisions. The sponsor of the measures claimed that there is increasing public sentiment in the Pittsburgh area for such legislation.

Rhode Island

Asks Utilities Inquiry

Governor Robert E. Quinn on April 28th ordered an immediate "investigation" of the operations and financial structure of Rhode Island public utilities and at the same time ordered Frederick A. Young, chief of the state division of public utilities, to take action with a view to abolishing the 15 cents a month charge on telephone handsets.

The New England Telephone and Telegraph Company sometime ago, after conferences with Mr. Young, abolished the 15-cent charge on handsets that had been in use for more than eighteen months. Governor Quinn moved to end the 15-cent charge, he said, after he read that the profits of the telephone company throughout the country last year were $23,000,000.

Governor Quinn also ordered Mr. Young to survey all public utilities as a means of effecting greater regulation. At the past session of the general assembly, several bills sponsored by Mr. Young were killed in committee. The purpose of these measures, he explained, was to clarify his powers and to require public utilities to make uniform financial reports.

At the special session of the general assembly last December $250,000 was appropriated out of the cumulative surplus for a survey of public utilities. Because of the condition of the state's finances this year, Governor Quinn indicated several months ago that this money would not be spent. Mr. Young also was reported to believe that the sum would be insufficient for a thorough survey with the limited facilities in his office. The governor did not say whether the $250,000 would be used in his proposed investigation or not.

Tennessee

Power Injunction Dissolved

A decree recording his recent decision in dissolving an injunction against construction of a municipal power distribution system in Knoxville was signed on May 4th by Chancellor A. E. Mitchell over the city counsel's objection to the wording.

They claimed the city's right to recover damages from the Tennessee Public Service Company, complainant in the suit, might be prejudiced by the decree which declared "moot" all questions pertaining to a contract to build the system. Hess & Barton, Inc., originally employed by the city to construct the first unit of the distribution layout, withdrew its contract about a year ago.

Decrees on the chancellor's decision were prepared by both attorneys for the city and the power company. Chancellor Mitchell accepted the power company's decree with slight modification.

Denies New Hearing

THE state supreme court on May 1st overruled a petition of the Tennessee Electric Power Company for a rehearing of its case against the city of Chattanooga involving a municipal power plant.

The power company had contended in the original suit that an act of the legislature authorizing the construction of a municipal plant and distribution system and the issuance of bonds for that purpose was unconstitutional. The court on March 27th ruled against that contention, affirming the Hamilton county chancellor who had sustained the validity of the law.

The petition for a rehearing was overruled in an opinion by Justice D. W. DeHaven.

Texas

Commission Bill Engrossed

THE house speeded through engrossment recently a bill to create a state utility commission, one of the items on the governor's must list, despite defeat of all general utility regulation bills in the senate earlier in the session.

The bill, by Fred Knetsch, was engrossed without a record vote after the previous question was ordered, 95 to 54, by sponsors to cut off debate and amendments. An attempt to suspend the rules and place it on final passage carried by a majority of 103 to 31, which was short by a few votes of the required four-fifths.

Efforts to kill the bill in view of the adverse senate action failed. It was attacked on a point of order, but Knetsch contended the bills which a senate committee reported adversely and which were not revived on a minority report were not identical with his proposal.

West Virginia

Invites Comment

THE state public service commission recently invited comment on its proposed order which would compel all electric utilities to set up a uniform system of accounting, including the original cost of the plant. The commission asked the electric companies, which conferred with the commission on the uniform accounts last December, to file their comments by May 14th.

A copy of the proposed order was forwarded to all involved electric utility companies.

Wisconsin

Urges "Little TVA" Bill

ACTIVITIES of the state rural electrification coördination office will be curbed after June 1st unless the "little TVA" bill before the legislature is passed, John A. Becker, state REA director, announced recently.

Becker stated that Federal funds which have financed state assistance to farmers seeking electric service through REA coöperatives would be exhausted May 1st. Other sources will provide emergency funds to carry on educational assistance to these groups until June 1st. The Wisconsin development authority bill would provide for even wider state sponsorship of public ownership and operation of utilities. The bill was engrossed for approval by the lower house.

Wyoming

Unite in Power Fight

RAY E. Lee, attorney general of Wyoming, recently said a joint memorandum opposing revisions sought by California in connection with Boulder dam power contracts had been approved by Colorado and Wyoming officials. Lee said the memorandum would be sent to the Interior Department in Washington, and added that Utah and New Mexico may join in the protest.

He said it was believed that any drastic rate reduction would prevent the dam from paying for itself, and would prevent the formation of a reclamation fund. Mr. Lee will be in charge of the movement for Wyoming.

The Latest Utility Rulings

Objective Rates Are Condemned

THE Arizona commission found that objective rates had resulted in discrimination and expressed the opinion that "this system of rates is impractical" and "because of its discriminatory nature it falls within the ban of our law." It was said to be not only statutory law but "common sense and fair play" that discriminations cannot be permitted as between consumers or subscribers of public service corporations. The commission described the situation as follows:

> In this instance, it has been found that two consumers side by side using about the same amount of electrical energy have been charged substantially different rates. The requirement that in order to make objective rates available, the consumer must use a larger volume of energy than the year previous, obviously cannot be made to work equitably and that is particularly true with reference to the household or domestic consumer. If we assume that John Doe is using all the electric energy that he needs, any excess over that amount would be of no added advantage or value, then it is manifest that to compel him to use a larger quantity would be wasteful and wholly unjustified. Perhaps the commercial user, particularly the merchant who takes advantage of window displays and similar methods of advertising, might advantageously, and possibly with profit, increase his consumption and thereby bring his service within the announced purpose of the objective rates.

Re Arizona General Utilities Co. (Docket No. 6663-E-531, Decision No. 8801).

Intercorporate Payments Held to Be under Lease Rather Than Power Contract

THE question presented to the Pennsylvania commission in an investigation of payments by the Pennsylvania Power & Light Company to Lehigh Valley Transit Company was whether the payments were made under a power contract or under a lease. The commission held that such payments were under a lease.

Back in 1913 the predecessor of the Pennsylvania Power & Light Company entered into a written contract with the transit company under which the transit company agreed to sell and the power company agreed to buy electric energy at a specified price per kilowatt hour with a fixed minimum monthly payment. Later the agreement was canceled but payments continued even after the generating plant of the transit company was shut down.

The electric company sold current to the transit company at a certain point and the current passed over the transit company's facilities to another point where it was redelivered to the light company and the light company purchased it from the transit company, but later a trolley line of the transit company was abandoned and the light company purchased the line and continued to use it for transmission of its current to its substation at the end of the line. A reduction in the monthly consideration was then made. The light company had the right to place its equipment in a plant of the transit company as far as space capacity of the plant permitted. The commission said:

> In other words, light company has the right to the use of any space in the Allentown plant which is not occupied by transit company facilities, and certain facilities of light company now occupy space in the plant. Therefore, admittedly, the use of this space by light company and the right to use any additional unoccupied space is part of the consideration for the payments here involved. . .

> The situation may be summarized. Admittedly, a portion of the consideration for the payments is the right of light company to use space in the Allentown plant of transit company. No current or power has been sold under the agreement since 1928, when the transit company ceased to generate power, except for a short period in March, 1936, when an emergency caused by floods required operation of the Allentown plant of transit company. The consideration under the agreement has changed only once since 1928, and the occasion for that change was a reduction in the facilities of transit company available for and used by light company. Although the annual reports of light company to the commission would on their face indicate that the payments involved are made for power sold by transit company, the president of light company denies the validity of such an implication, thus taking the inconsistent position that the arrangement under consideration is a power contract under which no power is sold.

It was pointed out that if service had been furnished under a power contract not filed with the commission, the company would be liable to a forfeiture to the commonwealth. On the other hand, since approval of the lease of property had not been secured, the agreement or arrangement was held to be legally void and payment thereunder could not properly be made. *Public Service Commission of Pennsylvania v. Lehigh Valley Transit Co. (Complaint Docket No. 11181).*

Invasion of Territory Not Permitted for Private Benefit

THE Maine commission, in finding that a telephone company was rendering adequate service and that an application by a subscriber for service from another company should not be granted, discussed the meaning of a statute prohibiting invasion of territory until the commission had made a declaration that "public convenience and necessity require such second public utility."

The commission said that in one sense the word "public" means everybody, the people, the whole body politic, but in another sense it does not mean all the public or most of the people or very many people of a place but so many of them as may be contradistinguished from a few. It seems to be opposed to the word "private." The commission continued with the statement:

> The word "public" as used in connection with the word "convenience" we construe to mean as the effect upon the people of the neighborhood in contrast to the private rights or benefits of the individual; and the word "necessity" would seem to indicate something that is needful, essential, requisite, or conducive to public convenience. As the evidence is presented in this matter, and as Mr. Fuller frankly states, he seems to be the one party interested, and interested solely to the extent of saving 10 cents per toll call on a call from Winthrop to Augusta, in case his telephone service is via the Lewiston, Greene and Monmouth Telephone Company.

Public Utilities Commission v. New England Teleph. & Teleg. Co. (F.C. 1087).

New Wisconsin Law Retards Rural Extension by Private Company

A GROUP of forty-two farmers, later joined by others, petitioned the Wisconsin commission for a rural electrical extension by the Wisconsin Power and Light Company, stating that they had decided that they "do not want electric service from the Rock County Co-op." The company was willing to make the extension but at the time of hearing a new law went into effect which, as construed by the commission, would not permit the extension because of coöperative activities.

Chapter 17, Laws of 1937, which went into effect on March 9th, provides in substance that if a coöperative association

has been incorporated and has filed with the commission a map of the territory to be served and a statement showing that a majority of the prospective customers are included in the project, no public utility shall begin any construction in the territory until after the expiration of six months from the date of filing. Moreover, if the coöperative has entered into a loan agreement with any Federal agency for the financing of its proposed system and has given written notice thereof to the commission, no public utility is permitted to begin construction until after the expiration of twelve months from the date of the loan agreement.

An objection that the statute was unconstitutional was dismissed by the commission with the statement that it is not for the commission to determine the constitutionality of a law as this duty devolves upon the courts, and the commission must assume in the administration of the laws which define its powers and duties that such laws and amendments thereto are constitutional until otherwise held by the courts. The commission also held that the statute applied notwithstanding the fact that the proceedings had been commenced before the law was enacted. *Millard et al. v. Wisconsin Power & Light Co. (2-U-1081, CA-362).*

Commission Asserts Jurisdiction over Rate of Company Operating Municipally Owned Plant

THE North Carolina commission dismissed an objection to its jurisdiction to regulate rates of the Smoky Mountain Power Company, which operates under lease an electric plant owned by Bryson City. The commission held that it has jurisdiction where the utility owns or operates its electric system.

The North Carolina statute authorizes regulation in the case of public utilities "other than such as are municipally owned or conducted." The company contended that by use of the word "or" rather than "and" the commission had no jurisdiction since the system was owned by a municipality. The commission resorted to the rule approved in construing statutes that the word "or" may be construed as "and" where the change better expresses legislative intent. Legislative intent was interpreted by construing together the section giving the commission jurisdiction and another section providing that no utility should discriminate between localities or classes of service. The commission said in part:

> All of which means, as this commission sees it, that where a utility serves a section, whether a part of its plant is leased from a municipality or not, there can be no distinction made in rates for the same sort of service throughout the entire territory served by the utility. Therefore, applying this section to the instant case, either this commission is authorized and commanded to make the rates within and without Bryson City the same, for the same class of service, or else if the position of the respondent is sustained that this commission has no jurisdiction over the rates in Bryson City, it must follow that this commission could not even regulate the rates outside of Bryson City, because it might result in a discrimination between the customers of the utility, thereby locking the rates charged by the utility throughout the entire territory served.
>
> This commission cannot accept the respondent's interpretation of the statutes, nor does it believe that the legislature intended to deny this commission jurisdiction to regulate the rates of a public utility in serving under lease a municipality which owns but does not conduct its own plant.

It was said to be clear that the legislature had in mind that where a municipality both owned and conducted its own plant it should regulate its own rates, or where it did not own its plant but purchased power or leased facilities from a private company and conducted its own operations that it would not be under the jurisdiction of the commission. The word "or" therefore, in the opinion of the commission, was loosely used and should be construed "and."

The commission in determining proper

rates held that the plant should be valued as though it were all owned by the company and that the rental paid for the leased property should be excluded from operating expenses. For the same reason interest and discount paid to banks on money borrowed by the company to pay the yearly rental were held to be improper charges.

An item charged as an operating expense for discount on preferred stock was excluded with the statement that discounts on stock or stock dividends are never chargeable to operating expenses, but are payable only from net profits which may accrue from a reasonable return upon a fair valuation of the property. *Citizens of Bryson City v. Smoky Mountain Power Company (Docket No. 620).*

Street Railway Company Not Entitled to Operate Busses As Matter of Right

AN application by the Seattle and Rainer Valley Railway Company for authority to substitute busses where interurban railway operations had been conducted was denied by the Washington Department of Public Service on the theory that the railway company was not entitled to a certificate as a matter of right because of prior carrier service and that the existing operation of bus lines over the route justified denial of the application.

The company contended that, since it had operated railway service between two cities for about forty years, it had a right to a certificate under a statute providing for the granting of certificates as a matter of right to an "auto transportation company" engaged in such business. The commission said that it was clear that the operations of the railway company were not being carried on as an auto transportation company and therefore the requirement that a certificate be granted because of good faith operation over the route prior to the effective date of the statute would not apply to a street railway company.

The commission observed that if a wrong policy had been adopted by the statute, the remedy was by application to the state legislature. Whether the policy adopted was right or wrong was not for the department to say. *Re Seattle and Rainer Valley Railway Co. (Order M. V. No. 25533, Hearing No. 1583).*

Reasonableness of Return Allowed a Public Utility

THE Maine commission in allowing a return of 5.3 per cent for a water utility, in a rate case, discussed the factors involved in determining the reasonableness of return. The commission said in part:

> The commission feels that a new and untried company may be entitled to higher rates because it must pay more for its money than one solidly established. But a company whose investment is safe, returns certain, and the risks reduced to a minimum does not obviously have such difficulties in acquiring capital. A rate of return should be such as to fairly stabilize profits and eliminate speculation as far as possible. It should be such as to provide a necessary reserve to give capital a commensurate reward during periods of depressed earnings and a sum sufficient to care for ordinary contingencies. The return should promote efficient and economical management, rather than punish such management and neither should it reward inefficient or wasteful management. The rate should result in procuring for the public the best service possible at the minimum price consistent with the foregoing...
>
> Compensation must, therefore, depend greatly upon circumstances and locality; the risk in the business is an important factor; the amount realized upon investments of a similar nature has its bearing; the fact the

company is secure from competition plays a part; the proposition that the interest is safe with little possibility of its being jeopardized affects the judgment of the commission. Speculative profits are not needed for seasoned utilities.

The commission refused to recognize a so-called demand note held by a parent company where the note had overrun the twelve months' period which by statute furnished the criterion for exemption from the requirement of commission approval. The company contended that by letting the note run there were advantageous tax savings which would benefit ratepayers. It was said to be to the advantage of the company in Federal taxes to take the earnings by way of interest rather than dividends on stock. The commission refused to concur in this and "set aside a Maine statute for any such alleged or real benefits to the holding company."

An arrangement under which payments were made to affiliated interests was declared unlawful in view of a statute prohibiting payments under any arrangement or contract with affiliated interests without commission authorization, although there was no contract. The commission said that the acts done were "an arrangement." *Presque Isle Water Co. v. Itself (F.C. No. 1080).*

Small Gas Customers Required to Pay Cost of Service

THE Wisconsin commission, in approving new rate schedules for gas utilities, found that gas bills would be increased for some of the smaller users because there was a reduction in the amount of gas included within the minimum bill of 50 cents from 400 cubic feet to 200 cubic feet. It was said, however, that justification for increasing the charges to the small users of gas arises from the fact that this class has not been paying its full costs of service.

The commission pointed to the fact that if one group of customers does not pay the full costs of their service, another group consisting of customers who make greater use of gas service must pay more than their fair share of costs. The commission made the following statement:

> The failure of the group of smallest gas users to pay the total costs of service arises because many of the costs of providing gas service do not depend upon the amount of gas used. A substantial amount of expense results from the mere connection of the customer, and shows but little variation between small and large users. Included in this class are the costs of meter reading and testing, billing, collecting and miscellaneous commercial department expenses, inspecting and adjusting customers' appliances, maintenance, and fixed charges (taxes, depreciation and interest) on the company's investment in service pipe and meter. These expenses must be met whether any gas is used or not, and do not vary between customers in proportion to the amount of gas used.

Milwaukee v. Milwaukee Gas Light Co. (2-U-259 et al.).

Commission Lacks Power to Change Contract Rate

THE supreme court of Alabama, without deciding the question of whether the state legislature had the right to set aside a rate contract approved by the commission or to authorize the commission to do so, held that the legislature had not so authorized the commission and that the commission could not set aside the rate without the consent of the parties involved in the contract.

The court also held that, in reviewing a decree which sustained a demurrer to a bill in equity attacking a commission order which changed contract rates, the court must review *de novo* and that a finding by the commission that the company had waived its contract was not conclusive. The question of waiver was one

of the questions to be examined anew by the court. The court expressed the opinion that the company had not only to show that it had not waived its contract right but also that the commission lacked power to change the rate. *Birmingham Electric Co. v. Alabama Public Service Commission et al. (173 So. 19).*

Restrictions Removed from Bus Operations on Street Railway Routes

THREE routes operated by a motor coach company from the downtown business section of Pittsburgh to termini in suburban residential areas parallel, along an arterial highway, street railway routes, and routes of a subsidiary of the street railway company to a certain point from which they branch for continuation to termini. Operation of two of the routes had been under authority which restricted local service along the lines of the street railway company. The commission recently removed such restrictions.

It appeared to the commission to be unreasonable to presume that highway arteries radiating from a city of the size of Pittsburgh were the chief source of revenue for bus or street railway operations into specific suburban territory. It also seemed unreasonable to assume that a suburban operation must deliberately pass by prospective passengers because another suburban operation first, through necessity, used the same main highway to effect its primary public service. It was said that so to hold would be adverse to the proper accommodation and convenience of the public and constrictive of the development of modern transportation in suburban territory.

The commission further found that the service of the motor coach company subsidiary to the railway had been inadequate in regard to frequency and that the fares charged had been excessive. This company had offered at the hearing to reduce fares and increase service, but the commission said that such a belated awakening to public responsibilities could not avail. Utility regulation must protect the public against arrogant disregard of its convenience, and also must protect the vigilant and progressive utility from public oppression. *Re Brentwood Motor Coach Co. (Application Docket No. 21418, Folders 25, 29, 30, 32).*

Other Important Rulings

THE Wisconsin commission held that a sanitary district organized under § 60.30 to § 60.309, inclusive, of the Wisconsin Statutes of 1935, to lay water mains and supply water service constitutes a municipal corporation and becomes a public utility with respect to its business of furnishing water. *Re South Lawn Sanitary District (2-U-1046).*

The Wisconsin commission, although generally favoring the minimum-bill type of rate for rural service, permitted a utility to reverse the usual practice by replacing a minimum-bill rate with a fixed-charge rate in territory where the utility investment for the average rural customer was roughly equivalent to the average investment for urban residential customers under an extension policy providing for customer financing of rural lines. Because of lower customer density and consequent higher customer costs than in urban territory the commission authorized a somewhat higher fixed charge. *Re Cross Plains Electric Co. (2-U-1090).*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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Points of Special Interest

Titles and Index

TITLES

INDEX

PUBLIC UTILITIES REPORTS

LOUISIANA SUPREME COURT

Southern Bell Telephone & Telegraph Company, Incorporated

v.

Louisiana Public Service Commission

(— La. —, — So. —.)

Valuation, § 21 — Rate base.

1. The Commission, although required to determine the just and true value of public utility property for the purpose of fixing rates, is not required to fix what might be termed an exact or precise value of all the property, for in the nature of things this cannot be done, p. 6.

Valuation, § 22 — Rate base — Use of price trend.

2. The Commission in valuing utility property for rate making may properly take into consideration price trends as one of the elements fixing value, p. 6.

Valuation, § 85 — Accrued depreciation — Consideration of depreciation.

3. Neither original book cost of utility property nor its reconstruction cost new should be considered present fair value, because the element of depreciation must be considered, p. 9.

Valuation, § 22 — Rate base — Changing values.

4. Present value and not original cost or cost of reproduction new should be considered in determining the rate base if the company's property has declined in value, from whatever cause, or if the company's property has enhanced in value, p. 9.

Evidence, § 9 — Judicial notice — Price and value levels.

5. A Commission is warranted in taking judicial notice of a general downward trend in price and value levels, p. 11.

Valuation, § 39 — Reproduction cost as measure — Effect of changing prices.

6. An estimate of reproduction cost new of public utility property based upon prices and values practically the same as those prevailing when the plant was originally built forms no dependable criterion of value after a general slump in price and value levels if there had been no appreciable rise in price and value levels following such slump, p. 11.

Valuation, § 125 — Overheads — Land as basis — Interest during construction.

7. Interest during construction should not be allowed on land, p. 12.

Valuation, § 96 — Accrued depreciation — Evidence to support deduction.

8. Adoption of a purely arbitrary and unauthorized method of ascertaining the amount of depreciation which a public utility property has undergone is not shown by the record when it appears that the Commission employed experts who examined the property and estimated the per cent rate of depreciation, the average age in years, the percentage of accrued depreciation, and the amount in dollars of the estimated accrued depreciation of each and every item of property, p. 14.

Valuation, § 97 — Accrued depreciation — Estimate inconsistent with annual allowance.

9. Estimates of accrued depreciation, made by a witness for rate-making purposes, are not fair to the ratepayers when there are wide discrepancies between the percentage of annual depreciation set up by the company on its books for the establishment of a depreciation reserve and the observed depreciation in the company's property as a whole found by such witnesses, p. 14.

Valuation, § 212 — Excess plant capacity.

10. A deduction for excess plant because of property left idle on account of an economic depression is warranted; investors in public utility corporations have no right to expect the public to underwrite their investments but must take losses along with investors in other kinds of property and must endure the common fate of all, p. 18.

Valuation, § 22 — Rate base — Value at earlier periods.

11. Value of utility property at the end of one year, although not conclusive as to the value at the end of the next year, does have some bearing, p. 20.

Valuation, § 408 — Evidence — Burden of proof — Enhanced value.

12. The burden is upon a public utility company in a valuation proceeding to show that property has enhanced in value since the filing of a report of tax value by the company, p. 20.

Valuation, § 46 — Rate base — Tax claim.

13. A tax report filed in behalf of a public utility company showing an appraisal of property, although not controlling, is evidentiary value in a proceeding to determine value for rate making, p. 20.

Appeal and review, § 34 — Burden of proof — Confiscation.

14. A public utility company, in a judicial proceeding to review a Commission order fixing rates alleged to be confiscatory, has the burden to establish the fact of confiscation, p. 22.

Appeal and review, § 49 — Commission rate order.

15. The question presented to the courts on review of a Commission rate

order is not what the Commission thought the company should receive as a return on its investment but whether the rates fixed are confiscatory, p. 22.

Evidence, § 3 — Judicial notice — Interest rate.

16. The court takes judicial notice of the fact that interest rates are extremely low, p. 22.

Valuation, § 332 — Going value — Separate allowance — Cost charged to operation.

17. An additional allowance for going concern value is properly denied when this intangible item is taken care of in the appraisal of public utility property and the cost of operating expenses, it appearing that there has never been any burden of building up patronage, that the company has no competition, and that the cost of training personnel and preparation of records has been charged to operating expense, p. 22.

Appeal and review, § 48 — Commission rate order.

18. Rate making is a legislative and not a judicial function, and the function of a court in reviewing a Commission rate order is to see that constitutional limitations are not transgressed by the rate-making body, p. 23.

[March 1, 1937.]

APPEAL *from lower court judgment annulling a Commission order reducing telephone rates; judgment reversed and satisfied and Commission order reinstated and made effective. For lower court decision, see 8 P.U.R.(N.S.) 26.*

APPEARANCES: Gaston L. Porterie, Attorney General, and James P. O'Connor, Henry O'Connor, and Joseph A. Loret, Special Assistants to the Attorney General, for defendant-appellant; C. C. Bird, Jr., J. C. Henriques, Charles Rivet, E. D. Smith, of counsel, and John T. Goree, of counsel, Attorneys for plaintiff-appellee.

ODOM, J.: In the latter part of 1934, the Louisiana Public Service Commission, hereinafter referred to as the Commission, on its own motion, instituted a proceeding styled Louisiana Public Service Commission v. Southern Bell Telephone Co., Inc., (hereinafter referred to as the company), its purpose being to investigate the reasonableness of the rates and charges established by the company in Louisiana. The company serves about one hundred exchanges in the state and furnishes toll service between these exchanges as well as other exchanges owned either by it or companies affiliated with it, in a group of nine southern states.

After making its preliminary investigation, the Commission notified the company to appear at an initial hearing set for December 13, 1934. The company appeared and introduced the testimony of several witnesses and filed in evidence numerous exhibits. The hearing was continued to and resumed on January 24, 1935, when additional witnesses were called and other exhibits filed by the company. At these hearings the company called

seven witnesses, all its own employees, and filed in evidence some fifty-seven exhibits.

The Commission's testimony was introduced at a final hearing on February 5, 1935. Its witnesses were Mr. Mark Wolff, a public utility consultant of Chicago and New York, and his staff of engineers and accountants, among them being Mr. Harold M. Olmsted, Mr. Hugh W. Abbett, an appraisal engineer for the Indiana Public Service Commission, and Mr. George S. Call, a certified public accountant, who was formerly chief of the bureau of accounts of the Pennsylvania Public Service Commission. These had all been previously employed by the Commission to assist in making the investigation touching the question whether or not the rates and charges established by the company in Louisiana were reasonable. In connection with the testimony of its witnesses, the Commission filed in evidence numerous exhibits in the way of charts, estimates, calculations, etc.

After all the testimony was put into the record and the case was argued by counsel for both sides, the Commission issued its Order No. 1530, dated March 2, 1935 (8 P.U.R. (N.S.) 1) by which new rates and charges were established. As a result, the company's annual net earnings in Louisiana will be reduced, if the new rates are allowed to go into effect, by slightly more than $600,000.

The company, on March 8, 1935, went to court with a suit in which it attacked the order of the Commission and sought to have it set aside on the grounds, mainly, that it was arbitrary, unreasonable, unconstitutional, and that the rates fixed were confiscatory. It alleged specifically that the methods adopted by the Commission in arriving at a valuation of its property used and useful in furnishing exchange service in Louisiana were so arbitrary and contrary to well-recognized methods that they were violative of the due process provision of the United States Constitution, as set forth in the Fourteenth Amendment, and as set out in § 2, Art. 1, of the state Constitution.

It was alleged that an examination of the findings of fact made by the Commission showed that the conclusions reached by the Commission were (a) without evidence to support them; (b) contrary to the evidence introduced; (c) based on evidence not legally cognizable; (d) founded on evidence not introduced; (e) based on methods which were wrong for determining the value of property; and (f) violative of the rudiments of fair play, and that the errors of law or procedure were so arbitrary and flagrant as to be violative of the due process of law guaranteed by both the Federal and state Constitutions.

It was further specifically alleged that the rates fixed by the Commission by its Order No. 1530 were so low, unreasonable, and inadequate that they would not and could not yield a reasonable return on the fair value of the company's property useful and used in furnishing exchange telephone service or intra-telephone service in Louisiana.

In sum and substance the company's complaint before the court was that in arriving at the rates fixed in its Order No. 1530, the Commission used what the Supreme Court of the

United States in one case called a "rough and ready" method of arriving at values and fixing rates, and that the rates fixed were so low that, if allowed to stand, they would result in confiscation of its property or the taking of its property without due process of law.

It asked the court to set aside the Commission's order, and further prayed that the Commission be restrained from putting its order into execution pending the final outcome of the case on its merits. The injunctive relief sought was denied. A trial of the case on its merits resulted in a judgment canceling and setting aside the Commission's Order No. 1530. From that judgment, the Commission appealed to this court.

If it be true as a matter of fact that the rates fixed by the Commission by its Order No. 1530 are so low that the operation of the company's business under them will amount practically to a confiscation of its property, then as a matter of law, the order is illegal and cannot stand.

Public service corporations operating in Louisiana are subject to strict legislative supervision and control, especially with reference to matters relating to rates and charges made for services rendered to the public. The machinery set up by the legislature for the exercise of its right of supervision and control of such corporations is a state agency designated as the Louisiana Public Service Commission. This Commission is authorized and empowered by special legislative acts to institute, on its own motion, and prosecute investigations to ascertain whether or not the rates and charges made by public service corporations for services rendered are reasonable and fair. If, after investigation, the Commission reaches the conclusion that the rates or charges are excessive, it may reduce them.

But the Commission's power and authority to fix rates and charges is limited always by the fundamental law laid down by the Fourteenth Amendment to the Constitution of the United States, which is that no state may "deprive any person of . . . propery without due process of law," and by § 2, Art. 1 of the state Constitution, which says that: "No person shall be deprived of . . . property, except by due process of law. Except as otherwise provided in this Constitution, private property shall not be taken or damaged except for public purposes and after just and adequate compensation is paid."

It must be conceded that if the state, through its agency, the Commission, has by its order in this case so limited the rates and charges which the company may make for the services which it must render its subscribers and patrons as to reduce its net returns to the point where it cannot realize "just and adequate compensation" on the present fair value of its property, the order is illegal and must be set aside, because its effect will be to take the company's property without due process of law. The state can no more do that than it could, by the exercise of its power of eminent domain, take private property for a public purpose without paying its true value at the time of taking.

The basic theories underlying the company's attack upon the Commission's order in this case are: (1)

that it resorted to unauthorized and illegal methods in determining the value of the company's property used and useful in the operation of its business, and (2) that the rates fixed are confiscatory.

[1] Before establishing rates and charges which a public service corporation may make in a case of this kind, the Commission must first of all determine the just and true value of the company's property useful and used in the business at the time the rates are fixed. This done, it is enabled, after ascertaining the net amount derived from the operation of the company's plant, to determine what are fair, reasonable rates and charges, and to fix them so as to yield a reasonable, fair return on the investment and at the same time protect the rights of the ratepayers.

In fixing rates, the use of an erroneous valuation of the property involved would necessarily result in harm and injustice either to the stockholders of the company or to the ratepayers. If the valuation is too low, it is the stockholders who suffer, and if too high it is the ratepayers. So that extreme caution must always be used in determining the value of the property.

By this we do not mean to say that it is necessary for the Commission to fix what might be termed an exact or precise value of all the property, for in the very nature of things this cannot be done. As was said by the court in the case of West v. Chesapeake & P. Teleph. Co. (1935) 295 U. S. 662, 79 L. ed. 1640, 8 P.U.R.(N.S.) 433, 439, 55 S. Ct. 894:

"But it is to be remembered that such a property as that here under consideration is a great integrated aggregate of many and diverse elements; is not primarily intended for sale in the market, but for devotion to the public use now and for the indefinite future; and has, so far as its market value is concerned, no real resemblance to a bushel of wheat or a ton of iron."

And in the same case the court said: "To an extent value must be a matter of sound judgment, involving fact data."

In the case of Los Angeles Gas & E. Corp. v. California R. Commission, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 240, 53 S. Ct. 637, the court said:

"The legislative discretion implied in the rate-making power necessarily extends to the entire legislative process, embracing the method used in reaching the legislative determination as well as that determination itself."

[2] This language was quoted with approval in the West Case, *supra*. So that it is true, as counsel for the company argue, that the method used by the Commission in this case in reaching its determination of proper rates, which necessarily involves its methods of arriving at the value of the company's property, is of prime importance. If that method was fundamentally unsound, then the "determination itself" was likewise unsound. The Commission is not permitted to use "crack down" or "rough and ready" methods in fixing values. Such methods were not only discredited but denounced in the West Case. Whether the Commission used such methods in this case is one of the prime questions involved.

The trial judge thought it did, and for that reason set aside the Commis-

sion's order. He followed the ruling in the West Case, which had not been published when the Commission issued its order. He seems to have been of the opinion that the West Case is on all fours with this one. After a reading of the West Case and after considering the methods used by the Commission in this case to determine the value of the company's property, we have reached the conclusion that the judge erred in finding that the methods used in the two cases are the same.

In the West Case the Commission made no appraisal of the physical plant and property of the company, but, as the court said, "attempted to determine present value by translating the dollar value of the plant as it was found by the district court in the earlier case at December 31, 1923, plus net additions in dollar value in each subsequent year, into an equivalent of dollar value at December 31, 1932." (8 P.U.R.(N.S.) at p. 435.)

In "translating" the dollar value the Commission used an index figure, or "fair value index," obtained by means of "commodity indices" intended to show price trends. It selected sixteen of these commodity indices, "one covering as many as 784 commodities, falling into different classes, and weighted for averaging. . . . The Commission then weighted these sixteen indices upon a principle not disclosed, giving them weights of from one to four, and thus got a divisor of thirty-one for the total obtained by adding the weighted results of all. This gave what the Commission styled its 'fair value index' which it applied to the 1923 value of the property then owned and to cost of all net additions in subsequent years, to obtain value as of 1932." (8 P.U.R. (N.S.) at p. 436.)

The opinion shows that the company "submitted proof of estimated reproduction cost and accrued depreciation" and none was offered in opposition. The Commission seems to have disregarded entirely the company's testimony, for the court said (8 P.U.R.(N.S.) at p. 436): ". . . *the valuation was based squarely on the figures obtained by the use of its index . . . the Commission relied solely upon the figure resulting from trending the dollar value* of plant owned in 1923 and cost of net additions subsequently made." (Italics ours.)

The court did not repudiate the practice of price trending, for it said (8 P.U.R.(N.S.) at p. 439):

"This is not to suggest that price trends are to be disregarded; quite the contrary is true. And evidence of such trends is to be considered with all other relevant factors." Citing St. Louis & O'Fallon R. Co. v. United States, 279 U. S. 461, 485, 73 L. ed. 798, P.U.R.1929C, 161, 49 S. Ct. 384; Clark's Ferry Bridge Co. v. Pennsylvania Pub. Service Commission (1934) 291 U. S. 227, 236, 78 L. ed. 767, 2 P.U.R.(N.S.) 225, 54 S. Ct. 427.

What it held was that the Commission was not warranted in basing its conclusion as to present fair value solely upon price trends or dollar trends. The opinion clearly shows: (1) that the Commission in fixing the value of the company's property, relied solely upon the figures resulting from trending the dollar value, and (2) that the "proof" submitted by

the company of estimated reproduction cost and of accrued depreciation was not considered. This, in effect, amounted to condemnation without a hearing.

In this respect the West Case, *supra,* is distinguishable from the one at bar. Here the Commission had before it these so-called "commodity indices," which were referred to by its witnesses, and considered price trends also as indicated by them. The Commission did not, as in the West Case, *supra,* base its valuation squarely upon the figure obtained by the use of them or rely solely upon the figures resulting from trending the dollar value. It took into consideration price trends as one of the elements in fixing value. This was not only permissible, but proper.

At page 4 of the Commission's printed report (8 P.U.R.(N.S.) at p. 5) under the general heading "Valuation," after saying that "Mark Wolff's Exhibits Nos. 1 to 10, inclusive, show that general and other average price levels were lower in October, 1934, in all but three years of the period during which this property was constructed piecemeal," and after mentioning bulletins published by the United States Bureau of Labor Statistics and "Bradstreet's Index," "construction material trends" and the "price level index of the Federal Reserve Bank of New York," it is said:

"Certainly, indices from such responsible and unbiased authorities as the U. S. Bureau of Labor Statistics, Bradstreet's Rating Agency, and the Federal Reserve Bank are entitled to great weight, considering that two out of the three are representative of capital."

So it appears that the Commission did attribute "great weight" to these factors. But it did not rely solely upon them in fixing the valuation of the company's property.

The report itself shows that other factors were considered.

The Commission, after hearing and considering the testimony of all the witnesses, both those called by it and those called by the company, reached the conclusion that the present fair value of the company's property used and useful in connection with its business, both interstate and intrastate, was approximately $21,500,000, of which $19,500,000 was used in intrastate business and was made the rate base.

While the company contended that its stockholders were entitled to a return of 8 per cent on their investment, the Commission thought that 6 per cent was sufficient and fixed that as a reasonable, fair return. Having fixed what it considered a proper rate base and a fair return to the stockholders, it took data furnished by the company from its books showing the company's gross annual receipts from intrastate business, its operating expenses, and its net earnings, and found that the company was earning much more than 6 per cent on the present fair value of its property. It then proceeded to divide the state into districts or zones and adopted a schedule of rates, charges, and tariffs for each zone separately, and ordered that they be put into effect immediately. The result was that if the rates and charges thus fixed were carried into effect, the company's net earnings on intrastate busi-

ness would be reduced approximately $600,000 per annum. The rates fixed, however, were sufficient to enable the company to earn at least 6 per cent for its stockholders on the basis of the present fair value of the property used in its intrastate business as found, but not sufficient to yield that much on the company's estimate of the fair value of its property used and useful in its intrastate business.

So that the all-important question presented is whether the Commission in fixing what it considered a fair value of the company's property at the date of the investigation and order acted arbitrarily and without sufficient evidence in reaching its conclusion. And here we may say that if the Commission's finding as to the fair value is correct, no fault can be found with the rates and tariffs fixed.

According to the data furnished by the company, which was accepted by the Commission, the capital invested in the plant up to December 31, 1934, was $33,399,982, and according to the company's estimate, which was also accepted by the Commission, the plant could be reproduced new at a cost of $33,609,100, or $209,118 more than its original cost.

In reaching what it considered present fair value, the Commission used two methods of computation, each producing practically the same results. It first deducted from $33,399,982 the book cost of the plant, the sum of $9,349,263, which was referred to in the tabulation as "depreciation reserve," but in reality was the amount of accrued depreciation found by the Commission, leaving a balance of $24,050,719. To that amount it added $301,878, the value of materials then on hand, the two sums totaling $24,352,597, which represented the value of the plant as depreciated; and from that amount it deducted $3,044,075, being 12½ per cent for "excess plant," and to the remainder added $100,000 for "cash working capital," reaching the figure of $21,408,522 as the present fair value of the property.

The other computation was this: From $33,609,100, the company's estimate of reproduction cost new, it deducted $2,106,500, or 6 per cent for "excess prices," the remainder being $31,592,600. From this it deducted $7,431,315, designated in the table as "Depreciation reserve—company's apportionment, as representing existing depreciation," leaving $24,161,285. To this sum was added $301,878 for materials and supplies on hand, making $24,463,163, from which was deducted $3,057,895, or 12½ per cent for "excess plant," leaving $21,405,268, to which amount was added $100,000 for "cash working capital," resulting in the figure of $21,505,268 as the present fair value of the property, this being approximately $100,000 more than the result reached by the other method of computation. The result of these computations being practically the same, the Commission fixed $21,500,000 as the present fair value.

[3, 4] That neither the original book cost of the property nor its reconstruction cost new should be considered present fair value must be, and in fact is, conceded. This is because the element of depreciation must be considered.

In fairness to the ratepayers, if the company's property has declined in value from whatever cause, the pres-

ent value, not the original cost nor the cost of reproduction new should be considered. On the other hand, if the company's property has enhanced in value, it should be given the benefit of the rise. As said by Mr. Justice Roberts, organ of the court in the West Case, *supra,* at p. 439 of 8 P.U.R.(N.S.):

"It is true that any just valuation must take into account changes in the level of prices. We have therefore held that where the present value of property devoted to the public service, is in excess of original cost, the utility company is not limited to a return on cost. Conversely, if the plant has depreciated in value, the public should not be bound to allow a return measured by investment. Of course the amount of that investment is to be considered along with appraisal of the property as presently existing, in order to arrive at a fair conclusion as to present value, for actual cost, reproduction cost, and all other elements affecting value are to be given their proper weight in the final conclusion."

To the same effect was the ruling in Los Angeles Gas & E. Corp. v. California R. Commission, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 241, 53 S. Ct. 637, where Chief Justice Hughes, organ of the court, said:

"The actual cost of the property—the investment the owners have made—is a relevant fact. Smyth v. Ames (1898) 169 U. S. 466, 547, 42 L. ed. 819, 18 S. Ct. 418. But, while cost must be considered, the court has held that it is not an exclusive or final test. *The public have not underwritten the investment.* The property, on any admissible standard of *present value,* may be worth more or less than it actually cost." (Italics ours.)

In the case presently under consideration, the fact that the company's property, its plant as a whole, had greatly depreciated in value at the date of the investigation and order, is undeniable. The Commission so found and held after considering all the elements affecting value, such as original cost, reproduction cost new, accrued or existing depreciation, and general price and value trends.

The company's books show that the historical or original cost of the entire plant as it stood at the date of the hearing was $33,399,982, which is the sum total of the cost of every item of material used whether raw or manufactured, the cost of lots, lands, servitudes, or rights of way, and the cost of labor. In sum, the cost of all items and elements which entered into the completed structure.

The company's engineer, Mr. Hill, made for it an estimate of the cost of reconstructing the plant new as of date October 31, 1934, his estimate being $33,609,100, or $209,118 more than the original cost. In making this estimate he presumably took into consideration the essential elements of cost of material, supplies, and equipment of every description and the cost of labor as well as the value of grounds, lots, rights of way, and servitudes. He was estimating the cost new of a complete plant as of date October 31, 1934. The fact that his estimate exceeded by more than $200,000, the original cost of the plant indicates, if it does not show conclusively, that the prices and values considered by him in making this estimate were practically on par with those

which entered into the original construction.

The testimony adduced at the hearing disclosed that the company's plant was built, in the main, prior to that period in our recent history commonly referred to as the "depression," which resulted in an economic condition not only in this state but throughout the entire country which was recognized by the Supreme Court of the United States as such an "emergency," such a "crisis" as "furnished a proper occasion for the exercise of the reserved power of the state to protect the vital interest of the community," an occasion for the enactment of legislation "for the protection of a basic interest of society" (Home Bldg. & Loan Asso. v. Blaisdell [1934] 290 U. S. 398, 78 L. ed. 413, 54 S. Ct. 231, 88 A.L.R. 1481), an occasion which the legislature of this state said was "an emergency of such a nature that justifies and validates legislative authority for the temporary suspension of the laws relative to mortgage foreclosure sales"; an occasion which had brought about, to quote the language of the act, a "severe financial and economic depression" which had "resulted in extremely low prices for the products of the farms and the factories and for real property, a great amount of unemployment, an almost complete lack of credit for farmers, business men, and property owners, and a general and extreme stagnation of business, agriculture, and industry."

The act of the Louisiana legislature, No. 159, was adopted and approved by the governor on July 13, 1934, prior to the date on which Mr. Hill made his estimates for the company. That act was held to be constitutional by this court in the case of Metropolitan Life Ins. Co. v. Morris (1935) 181 La. 277, 159 So. 388.

The witnesses called by the Commission testified, and the testimony was not denied (nor could it be) that since the major portion of the company's plant was built, there had been a slump in prices of commodities of all kinds, of raw materials as well as manufactured supplies and utilities used by the company in building and assembling its plant as a whole, that the price of labor, an important factor, had greatly declined—that there had been a general downward trend in prices and values. In connection with the testimony, the witnesses referred to commodity indices prepared to show price trends, but did not rely solely upon them.

[**5, 6**] The Commission would, we think, have been warranted in taking official notice, as courts have done, of this general downward trend in price and value levels. In the Los Angeles Case, *supra,* at p. 243 of P.U.R. 1933C, the court said:

"We have had occasion to take judicial notice of the high level of prices of labor and materials prevailing not only from 1917, as incident to the war, but also in 1922 and 1923, and that there was no 'substantial general decline' in such prices from that time to 1926." Citing several cases.

The court in that case said further (P.U.R.1933C, at p. 245):

"But we know that the estimates of present value, taken as the cost of reproduction as of December 31, 1929, based upon average prices from 1926 or 1927 to 1929, furnished no dependable criterion of values in the succeeding years. The country was fac-

ing a most serious decline in prices. It was entering upon a period of such depression as to constitute 'a new experience to the present generation.'"

The testimony shows that since the general slump, there had been no appreciable rise in price and value levels up to October, 1934, when Mr. Hill's estimate of the reproduction cost new of the company's property was made, and since his estimate was evidently based upon prices and values practically the same as those prevailing when the plant was originally built, it formed no "dependable criterion of value" in 1934. Whether Mr. Hill's estimate of the reproduction cost of the plant in October, 1934, is correct, depends upon whether the price and value levels used by him in making that estimate were correct. The Commission found that they were too high and deducted 6 per cent for excessive prices, amounting to $2,016,500.

This deduction was an estimate reached by considering various calculations made by the witness and the general downward trend of price and value levels. In Hill's estimate he valued the lands at $423,400, whereas the book cost was only $360,880. Hill's affidavit showed that the present fair value of the land was $399,204, or $24,196 less than the value used in his estimate. He figured interest rates at 8 per cent, which the Commission found was too high. It was shown that a large percentage of the equipment and materials used by the company in constructing its plant originally, and which Hill figured as going into the plant if built new, were assembled, or manufactured and sold to the company by the Western Electric Company, a corporation owned and controlled by the American Telephone and Telegraph Company, of which the Southern Bell Telephone Company, the plaintiff here, is a subsidiary. It was shown that the Western Electric Company enjoyed a monopoly in so far as sales to the Southern Bell Telephone Company were concerned, and that its prices, instead of trending downward as all other prices had, had trended progressively upward from about 1930 to October, 1934.

The increase in these prices was shown in detail on a statement furnished by the company. It shows that in September, 1930, there was an increase of 10 per cent in the price of certain types of standard switchboards, 25 per cent for frame work, assembly, and wiring the same. Certain other standard switchboards were increased 15 per cent, the frame work 25 per cent, and assembly and wiring 35 per cent. On November 1, 1930, further increases from 6 per cent to 20 per cent were made. Then on January 1, 1934, further increases from 6 per cent to 20 per cent were made, and another increase on July 1, 1934. Hill's reproduction estimate goes into detail showing instances where it exceeded the book cost. It showed that for central office telephone equipment, the reproduction cost exceeded book cost by $1,261,486, and for station apparatus $172,961, a total of $1,434,447.

[7] In Hill's estimate of reproduction cost new, he included an item for interest on capital during construction of $1,567,800, which interest was calculated on the basis of 8 per cent and includes interest on lands amounting to $30,878. The Commission

found that the rate of interest used by Mr. Hill was excessive by at least 2 per cent, its finding being that 6 per cent was a reasonable rate. It disallowed interest on lands altogether, which was correct under several decisions of the United States Supreme Court. Taking the increase in prices on switchboards and central office equipment, amounting to $1,434,447, the excessive amount of interest, totaling $415,108, and the excessive land values amounting to $24,196, the grand total is $1,873,751, which amounts to approximately 6 per cent of the reproduction cost new of the company's property used in its intrastate business. These figures did not take into consideration the decline in the price of labor from 1930 to the end of 1934. So that it will be seen that the Commission's deduction for excess prices is substantially correct.

The company's statement shows also that Hill's estimate on certain items was less than book cost, as in the case of cable, also furnished by the Western Electric Company, where the estimated cost was $700,173 less than book cost. There is also testimony showing that some of the items entering into Hill's estimate had not, as a matter of fact, increased in price, but had declined slightly.

It would serve no useful purpose to go into detail as to what the eight volumes of testimony and exhibits show in the specific points in dispute. The outstanding facts are that this estimate of the reproduction cost of the plant new was made in October, 1934, when the price of labor, the price of materials of all kinds, both raw and manufactured, and the value of real estate had slumped to a level which threatened disaster. And yet the estimated cost of reproduction exceeded the book cost by more than $200,000. Considering the testimony as a whole, we think the Commission's correction of the estimate was proper.

It deducted 6 per cent from the estimate on account of excessive prices and values. It may be that mathematically this is a fraction too high or too low. But based upon figures and the calculations of experts which we find in the record, it is substantially correct and we approve the Commission's findings on this point.

From the company's estimate of the reproduction cost new of the plant, the Commission deducted $7,431,315 for existing or accrued depreciation. We understand that counsel for the company concede that in order to arrive at the present fair value of the property for the purpose of fixing rates, it is proper to take into consideration and to deduct actual existing depreciation. We quote from the brief, page 181:

"We have already pointed out (citing numerous cases) that the law requires that the actual existing depreciation must be determined and must be deducted from reproduction cost new. No other kind of depreciation is deductible, regardless of the difficulty involved in ascertaining the actual existing depreciation."

And again counsel say in their brief at page 192:

"The company is entitled to earn a fair return on the actual fair value of its property. Manifestly, if some figure other than existing depreciation is deducted, present fair value is not obtained."

In Los Angeles Gas & E. Corp. v.

California R. Commission, *supra*, at p. 245 of P.U.R.1933C, the court said:

"In determining present value, deduction must be made for accrued depreciation." Citing Knoxville v. Knoxville Water Co. (1909) 212 U. S. 1, 10, 53 L. ed. 371, 29 S. Ct. 148; Minnesota Rate Cases (1913) 230 U. S. 352, 457, 57 L. ed. 1511, 33 S. Ct. 729, 48 L.R.A.(N.S.) 1151, Ann. Cas. 1916A, 18.

In the Minnesota Rate Cases, *supra*, at p. 434 of 230 U. S. the court said in speaking of the proper rate base:

"The basis of calculation is the 'fair value of the property' used for the convenience of the public. Smyth v. Ames (1898) 169 U. S. 466, 546, 42 L. ed. 819, 18 S. Ct. 418. Or, as it was put in San Diego Land & Town Co. v. National City (1899) 174 U. S. 739, 757, 43 L. ed. 1154, 1161, 19 S. Ct. 804: 'What the company is entitled to demand, in order that it may have just compensation, is a fair return upon the reasonable value of the property at the time it is being used for the public.' "

And the court quoted with approval the following from the case of Smyth v. Ames, *supra*, at p. 547 of 169 U. S.

"On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."

[8, 9] So that the controversy between the Commission and the company on this particular point is not whether accrued depreciation should be deducted in order to ascertain present fair value, but whether the Commission deducted the correct amount. The company conceded that it would have been proper to deduct the sum of $3,891,700 for depreciation, which is $3,539,615 less than was deducted.

The company arrived at its figure by using Hill's estimate of the percentage of depreciation of the property as a whole, which he said was 11.5 per cent. The Commission thought the property had depreciated in value at least 22 per cent and possibly 23 per cent. The difference in these percentages accounts for the difference between the amount deducted and the amount which the company says should have been deducted. The company's chief complaint is that the Commission acted arbitrarily in fixing the amount of depreciation—that its conclusions find no support in the record.

It is said that the Commission made no examination of the company's property to serve as a basis for its appraisal and valuation. That is true in part only, as we shall presently show. It is said also that the company's estimate of values and depreciation was based upon an examination of the physical property made by its chief engineer, Hill, and his corps of assistants, and should therefore have more weight than that of the Commission. While the record shows that the witnesses for the company made a more extensive examination and inspection of the property than did the witnesses for the Commission, it is not true that the company's witnesses made a complete examination, nor is it true that the Commission's witnesses made none. Neither side pretends its witnesses made a complete, minute inspection and appraisal of all the component parts of this utility

plant. That was not to be expected. In cases of this kind, the value of the property and the amount of depreciation necessarily involve estimates and sound judgment. The estimates should, of course, have some basis, some foundation to support them, and not be purely arbitrary. In the very nature of things it is wholly impracticable, if not impossible, in cases of this kind, for either side to make a complete, minute inspection and appraisal of all the constituent parts which make up a vast, composite telephone system, nor can the exact value of such a plant be determined. The plant is not a commercial product and has no market value. Its original cost may be ascertained by an inspection of the company's books, and its reproduction cost new may be estimated. But neither the original nor the estimated reproduction cost of the plant is to be used as the present fair value of the property. To say that the legislature in order to establish proper rates and charges in cases like this must first make a complete inspection, inventory, and appraisement would be almost tantamount to saying that rates and charges once established could never be changed, because the time and expense involved for such purpose would be prohibitive.

The argument that the Commission adopted a purely arbitrary and unauthorized method of ascertaining the amount of depreciation which the company's property has undergone is not supported by the record. For that purpose it employed experts, among them being Mr. H. W. Abbett, an engineer who graduated at Purdue University in 1916, went with the Indiana Public Service Commission in 1919, and stayed with it until 1934. He was engineer on the staff making appraisals and reports for that Commission and had made appraisals of the properties of the public utility corporation in that state, including telephone companies. He was asked if he had examined "some of the property" of the company in Louisiana, and said:

"Yes, in various parts of the state, I examined several of the exchanges, almost all their exchanges in New Orleans and in Shreveport, Alexandria, and Baton Rouge." (Record p. 2032).

He exhibited and explained a statement which he had made up, based, he said, partly on his examination of this property, partly on his experience gained in other similar cases, and partly on figures shown by the company's books. This statement, found at page 2369 of the Record as "Abbett Exhibit A," is made out in detail, showing the admitted original cost of each and every item of property, such as lands, rights of way, buildings, central office equipment, both manual and dial, station apparatus and installation, drop and block wires, etc., which entered into the plant as a whole. It shows further the estimated per cent rate of depreciation, the average age in years, the percentage of accrued depreciation, and the amount in dollars of the estimated accrued depreciation of each and every item of the property. According to his estimate, the existing depreciation amounts to $7,669,455.81, or approximately 22 per cent, or $238,140 more than the Commission deducted from the estimated cost of reproducing the plant new.

Mr. Hill, the company's engineer, used practically the same methods in arriving at the amount in dollars of the existing depreciation, but reached a different conclusion. He thought that not more than $3,891,700 should be deducted, but conceded that much.

The Commission after hearing the testimony and examining the exhibits presented by these expert engineers and the testimony and exhibits of auditors and accountants for both sides, reached the conclusion that Abbett's estimate more nearly reflected the present existing depreciation than did Hill's, and accepted it.

It is physically impossible for us to collate and analyze the figures in this voluminous record. In fact, it is not our function to do so. But an examination of some of the tables filed by Mr. Hill has led us to the conclusion that the estimates of depreciation made by him for rate-making purposes are not fair to the ratepayers. For instance, he shows that the company owns several central office buildings in the state. The Franklin dial office was erected in 1926 at a cost of $122,-042.34. The building was therefore nearly eight years old at the time of his estimate, and while the company set up on its books for depreciation reserve purposes an annual depreciation rate of 2.1 per cent, he estimated that the building had in its life of eight years depreciated only $6,-293.35, or 5.16 per cent. The main office building in New Orleans was erected in 1916–17 at a cost of $627,-517.80, and while the company had set up on its books an annual depreciation rate of 2.1 per cent, it had during its life of nearly seventeen years depreciated only $59,825.45, or 9.53 per cent or approximately 0.6 per cent per annum.

The building at Shreveport was erected in 1925–26 at a cost of $323,-148.65. An annual book depreciation of 2.1 per cent was set for it, but after eight years Mr. Hill found that it had depreciated only $13,539.25, or 4.19 per cent.

By multiplying the annual depreciation rate of 2.1 per cent set up on its books by the company for each of these buildings by its age, it would appear that there should have been found a total depreciation of approximately 16.8 per cent on the Franklin building, 34.86 per cent in the main building in New Orleans, and 17.64 per cent in the Shreveport building instead of 5.16 per cent, 9.53 per cent, and 4.19 per cent respectively, as found by Hill.

These and other wide discrepancies between the percentage of annual depreciation set up by the company on its books for the establishment of a depreciation reserve and the observed depreciation in the company's property as a whole found by its witnesses brought forth the following comment by the Commission, on page 19 of its Order No. 1530 (8 P.U.R.(N.S.) at pp. 15–17):

"In connection with the discussion of the subject of accrued depreciation above, it was stated that the company's present annual charge for depreciation purposes is 4.64 per cent, which is applied to the book cost of the depreciable property, and it was pointed out that in making such charge the company is attempting to provide for inadequacy of plant when, as a matter of fact, there is instead a large surplus of facilities. . . .

"The excessive character of the company's depreciation charges in recent years is indicated by the fact that in the past four years the amount taken out of revenues and credited to the reserve exceeded the charges against the reserve for retirements by approximately $1,000,000 a year. In other words, the company's patrons have been called upon in these days of economic distress to furnish $1,000,000 annually in excess of what the company has actually expended in making good the depreciation in its property. . . .

"The Commission does not take the extreme view that the entire amount of this million-dollar difference between the credits and charges to the reserve should be made available for rate reductions, but it finds that under existing conditions the company's annual charge for depreciation is grossly excessive and that a proper charge at present should be based approximately upon the physical lives of the various elements of the property. An allowance on this basis was testified to by Mr. Abbett, resulting in a composite rate of 3.14 per cent, and the Commission believes this is a liberal charge to operating expenses at the present time."

In order to arrive at the present fair value of the company's property useful and used in the production of service, the Commission took into consideration (1) the original or book cost, and (2) the estimated reproduction cost new. In each instance it made deductions for depreciation. In arriving at the proper amount of deduction it considered the testimony of the experts, both engineers and accountants, and reached the conclusion that engineer Abbett's estimate was approximately correct, although it deducted slightly less than his tables showed.

The methods used by Abbett seem to be in line with those prescribed by the Interstate Commerce Commission and those approved by the United States Supreme Court in the leading cases. Hence it cannot be said, we think, that the Commission acted arbitrarily or used improper methods.

It does not appear that the Commission ignored or failed to consider the testimony adduced by the company. On the contrary, it considered all the testimony. As to whether it should accept the estimates made by Abbett, its own engineer, rather than that of the company's engineer, Hill, was a matter within its own sound discretion.

We think it has reason to regard as unreasonable estimates made by some of the company's witnesses. As one instance, Hill's estimates of depreciation on the buildings to which we have already referred. Another, Mr. Woodruff's "over all" estimate of the present fair value of the plant. He gave it as his opinion that the present value of all the property in the state at the time the case was presented was $34,000,000, and of that used in intrastate business $31,000,000. He said that in arriving at this conclusion he had taken into consideration all the factors entering into a proper estimate of present fair value, including depreciation. Considering the fact that his estimate exceeded not only the original cost but the estimated cost of reproducing the property new, and the further fact that it exceeded by nearly $15,000,000 the

sworn valuation placed by the company for taxation purposes; and the further fact (of which the Commission was warranted in taking official notice) that during the so-called depression period, the value of all property slumped enormously from that which prevailed in the peak years; it it not surprising that the Commission was not favorably impressed with the company's estimates.

[10] The Commission made a further deduction of $3,044,075, or 12.5 per cent, for excess plant or facilities not in use. That there was a margin between plant capacity and plant in use at the time this investigation was made and the order issued, of considerably more than double the percentage deducted is well established by the testimony. During the peak or boom years from 1919 to 1927, the company greatly enlarged its plant facilities in response to increased public demands and demands made by the Chairman of the Public Service Commission. There were times during those years when the company could not furnish all the telephones requested. Since there were greater needs, the company furnished greater facilities, and it is in evidence that by the end of 1928, the company had so enlarged and broadened its plant that its capacity for service exceeded the demands by approximately 12.5 per cent. In other words, due to this enlargement it had, at the end of 1928, "excess plant facilities" not in use of about 12.5 per cent. This excess was to take care of anticipated future needs. In commenting on this situation counsel for the company say in their brief (page, 120*):

"There is no evidence that the company has planned and laid out its properties to meet its needs in the future in an unreasonable manner or that any of its expenditures in that behalf are unreasonable or beyond what a prudent business man would do under like circumstances. There is no evidence of bad faith, waste, negligence, or improper judgment."

"Public service companies cannot wait until their facilities break down or prove unequal to the demands upon them before making the needful additions and improvements. Business judgment must be employed to anticipate reasonable future needs and to make provision for them in advance. To do otherwise would be short-sighted, wasteful, and uneconomical, and would, in the long run, entail heavier charges upon the subscribers and at the same time would deprive them, temporarily, at least of the additional facilities due to the delays necessary for the installation of the additional equipment required."

Page 124: "There is no contention that the existing margin in 1930, prior to the depression, was too great and, as a matter of fact, the Commission in its opinion admitted that the margin of 12½ per cent in 1930 was reasonable. (Commission opinion, pp. 23–29, R. 2310.) It has never been contended that at that time the company had provided more facilities than were reasonably necessary to permit it to discharge its obligation."

Counsel have correctly stated the facts and no fault can be found with their argument, which, in sum, they state in the following language, which we quote from page 117 of their brief:

"The company, as a public service

corporation, is legally obligated to furnish adequate service on demand and to do this must necessarily make the provision for adequate facilities in advance of the demand."

The position taken is amply supported by authority. Reasonable excess or overbuilding is not to be condemned, nor has it ever been so far as we know. It is in keeping with sound business methods. The court in the case of Southern Bell Teleph. & Teleg. Co. v. South Carolina R. Commission (1925) 5 F. (2d) 77, 94, P.U.R.1926A, 6, 42, well said:

"The defendants claim that the value of the additional equipment so provided for future use should not be included in the present value on which remuneration should be allowed, on the ground that it is idle capital. But such equipment is not idle capital in the proper sense of the term. A business concern, and especially a telephone company, must look to the future as well as the present. It is the part of wisdom to forecast the growth of communities they serve and be prepared to meet new conditions as they arise."

Counsel in their brief repeatedly hark back to the conditions and necessities which prevailed at the time of this overbuilding. But they blink these facts established by the record: (1) That these excess plant facilities were provided during the state's greatest era of prosperity and development; and (2) that immediately following that era this state, like all others, suffered incalculably from the effects of an economic depression the like of which this generation had not seen; and that (3) from the peak period up to the end of 1934, this company, in common with all other business enterprises, had not only been unable to hold that which it previously had, but had lost business to an alarming extent. The number of its subscribers and patrons dwindled constantly and greatly, the decline approximating 18 per cent. Adding this percentage of decline to the percentage of margin (12.5 per cent) which the company had before the beginning of the depression period, it would appear that at the time the Commission's order was issued there was an excess margin of facilities of about 30 per cent.

The experts on both sides thought, and the Commission conceded, that there would be considerable growth in business from the end of 1934 to the end of 1936. But none of the witnesses estimated that the growth would be sufficient to absorb anything like the 18 per cent of loss during the depression. This loss may and, in time, probably will be recouped. If and when it is, the company will still have the 12.5 per cent margin of excess which it provided during the boom period.

Now the question is whether the ratepayers should be called upon to make good the company's losses due to these unforeseen conditions. The answer is found in the common-sense proposition that investors in public utility corporations, the stockholders, have no right to expect the public to underwrite their investments. When the value of the property in which they invest slumps due to abnormal economic conditions, they must take losses along with investors in other kinds of property. They must endure the common fate of all. As the court said

in the West Case, *supra,* at p. 439 of 8 P.U.R.(N.S.): ". . . the public should not be bound to allow a return measured by investment." See Los Angeles Gas & E. Corp. v. California R. Commission, *supra.*

Due to bad business conditions, a large percentage of the company's property, in addition to the 12.5 per cent margin originally provided, was idle when the order was issued. The deduction for excess plant had reference to that percentage of the property left idle on account of the conditions named. We think the deduction was warranted under the rulings in the following cases: Smyth v. Ames (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418; San Diego Land & Town Co. v. National City (1899) 174 U. S. 739, 43 L. ed. 1154, 19 S. Ct. 804; San Diego Land & Town Co. v. Jasper (1903) 189 U. S. 439, 47 L. ed. 892, 23 S. Ct. 571; Willcox v. Consolidated Gas Co. (1909) 212 U. S. 19, 53 L. ed. 382, 29 S. Ct. 192, 48 L.R.A.(N.S.) 1134, 15 Ann. Cas. 1034; Minnesota Rate Cases (1913) 230 U. S. 352, 57 L. ed. 1511, 33 S. Ct. 729, 48 L.R.A.(N.S.) 1151, Ann. Cas. 1916A, 18; Kansas City S. R. Co. v. United States (1913) 231 U. S. 423, 58 L. ed. 296, 34 S. Ct. 125, 52 L.R.A.(N.S.) 1; United Fuel Gas Co. v. West Virginia Pub. Service Commission (1929) 278 U. S. 322, 73 L. ed. 402, 49 S. Ct. 157, and Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission (1934) 292 U. S. 398, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763, 91 A.L.R. 1403.

The company's next complaint is that in considering the estimates of the reproduction cost new of the plant, the Commission allowed an insufficient amount for working capital. The amount allowed was about $100,000, whereas the company claims it should have been allowed about $355,000. The Commission's reasons for allowing no more than it did are set out in detail and at some length in its report. Its conclusion was based upon facts which we shall not review. It suffices to say that it heard testimony touching the point, and its findings seem reasonable.

[11–13] The Commission found that the fair value of the company's property was $21,500,000. This is $2,292,790 more than the company's tax commissioner, Mr. Edward Lyle, valued the property for taxing purposes on April 1, 1934. On that date he submitted to the Louisiana Tax Commission a detailed, itemized statement of all the property owned by the company in Louisiana, and in a column headed "Actual value" showed his appraisal in dollars of each class or kind of property, such as miles of pole lines, miles of copper wire, miles of iron wire, central office equipment, real estate, and improvements; all other personal property, etc. The sum total of the values listed is $19,207,210. Attached to this statement and appraisal is his affidavit that the "foregoing report of Southern Bell Telephone and Telegraph Company, Incorporated, is true and correct and that the values placed on all items represent the actual cash value thereof as of December 31, 19—."

This report was submitted to serve as a basis for taxation for the year 1933. Counsel for the company, in their reply brief, say that the value of the property at the end of 1933 has

no bearing on the question of its value at the end of 1934, when the investigation was made. It is not conclusive on that point, but it does have some bearing. That report was filed in evidence at the hearing and counsel knew that it was filed for a purpose. If, as a matter of fact, the property had enhanced in value between the end of 1933 and the end of 1934, the burden was upon the company to show it. No such proof was made.

Counsel argue that this report should not be considered as evidence, and in support of their argument cite three cases decided by this court. Rapides Grocery Co. v. Grant (1932) 174 La. 1083, 142 So. 696; Highway Commission v. Guidry (1933) 176 La. 389, 404, 146 So. 1, and Peavy-Wilson Lumber Co. v. Jackson (1926) 161 La. 669, 109 So. 351.

In the Rapides Grocery Company Case we said that evidence of the amount at which a stock of merchandise was assessed for taxation proved nothing as regards its actual cash value. The Guidry Case involved the expropriation of land for a right of way for a public road, and we said it was a matter of common knowledge that real property in this state was not assessed at its actual cash or market value. But we said, and this is important:

"The assessed value may be considered as a factor in determining the true value, but it is not controlling."

In the earlier case of Peavy-Wilson Lumber Co. v. Jackson, *supra,* at p. 673 of 161 La. the court in speaking of the reports required by law to be made by all corporations other than public service corporations, said:

"It is clear that such reports are not intended as the basis of individual assessment, but for comparison, in order to arrive at an average fair value of the plants and products of such corporations."

These cases do not support counsel's argument that sworn reports made by property owners as to the value of their property are not to be considered along with other factors in determining true value of property.

In rate-making cases, Federal courts have held, more than once, that sworn statements of value by public utility corporations are admissible and may be considered. In San Diego Land & Town Co. v. Jasper, *supra,* the United States Supreme Court held, to quote paragraph 3 of the syllabus (47 L. ed. 892) which is a correct statement of the ruling on this point:

"The valuation of a waterworks plant for purposes of taxation may be considered by the courts in determining the reasonableness of water rates as fixed by a board of supervisors,—especially where such valuation was sworn to by officers of the water company."

In Great Falls Gas Co. v. Montana Pub. Service Commission, 34 F. (2d) 297, P.U.R.1929E, 628, 632, the court said that such reports ". . . were properly received in evidence as admissions against interest." Citing the San Diego Case, *supra.* To the same effect is the case of Fort Worth Gas Co. v. Fort Worth (1929) 35 F. (2d) 743, P.U.R.1930C, 203.

In the case of Adams Express Co. v. Ohio State Auditor (1897) 166 U. S. 185, 220, 41 L. ed. 965, 17 S. Ct. 604, the court said:

"Now, it is a cardinal rule, which should never be forgotten, that what-

ever property is worth for the purposes of income and sale it is worth for purposes of taxation."

The value of the company's property sworn to by Mr. Lyle is not controlling. But it has evidentiary value in cases of this kind. It should be and was considered by the Commission in determining present fair value. It certainly is relevant in considering the weight to be given the testimony of other employees of the company. The discrepancy between Mr. Lyle's sworn valuation of the property, which he placed at $19,207,210 for taxation purposes, and the valuations found by Woodruff and Hill for rate-making purposes, is too glaring to be overlooked.

[14] We do not find that the Commission used unauthorized or unfair methods in arriving at the present fair value of the company's property or that it refused or failed to consider the testimony offered by it. In the last analysis and in sum, the company's complaint is that the rates fixed by the Commission are confiscatory. That being its complaint and the main issue, the burden was upon it to establish that fact. In our opinion it has failed to discharge that burden.

[15, 16] The Commission said in its order that the company was entitled to a return of 6 per cent. According to its calculations the rates fixed will enable the company to realize at least that. But counsel say that if, by meticulous calculations, it can be shown (and they claim they have shown) that the return will be even the smallest fractional part of one per cent less than 6 per cent, the rates are confiscatory. In other words, if the returns amount to the smallest fraction less than the Commission said the company was entitled to earn, the order must be set aside as illegal.

The question presented in this case is not what the Commission thought the company should receive as a return on its investment, but whether the rates fixed are confiscatory. It cannot reasonably be said that if the returns under the rates fixed will fall slightly under 6 per cent, say to 5.95 per cent, 5.5 per cent, or even 5 per cent, the Commission's order will result in confiscation, and that is the test. It is a matter of such common knowledge that we take judicial notice of it that interest rates are extremely low, lower than ever known in this country. Fortunate indeed is the investor who can realize as much as 5 per cent on good investments, and many are satisfied with 3½ per cent.

In the case of Alexandria Water Co. v. Alexandria (1934) 163 Va. 512, 7 P.U.R.(N.S.) 53, 114, 177 S. E. 454, the court disregarded the suggestion and argument here made, saying:

"But we are not here concerned with what the Commission in the exercise of its legislative discretion deems a fair and reasonable return. Upon a judicial review, we are only concerned with this ultimate question, Are the rates prescribed confiscatory?"

[17] The company complains of the refusal of the Commission to allow its claim for "going concern value." This claim was presented for consideration at the hearing. It was not allowed and is not discussed in the report.

By "going value" or "going concern value" is meant a value or asset which

arises from having an established or going business.

In rate-making cases the paramount question is whether the rates fixed will result in the confiscation of the public utility's property, and whether going concern value should be regarded as a distinct element of value in fixing rates depends upon circumstances. In our opinion this is not a case where going value should be allowed.

The company claims that it should be allowed more than $3,000,000 under this heading. This claim is made for "Cost of making going concern with organized forces and attached business," Hill's exhibit, page 1777 of the record. Under this heading are included such items as cost of organization, training of employees, planning and preparation of records, maintenance of plant in advance of beginning service, getting subscribers, interest on investment prior to getting started, salaries paid officers and employees prior to getting started, and the like.

As relating to this claim it is pertinent to observe that this is not a new plant but was completed as a going concern years ago, and that every item of expense listed has long since been paid by the ratepayers. The company has always taken from the amounts collected sums sufficient to take care of operating expenses and to take care of the expenses of organization. The amount claimed is reflected in other items carried on the books of the company.

There is nothing to justify a holding that the claim of going concern value should have been considered by the Commission as an item of property separate from the appraisal of the plant as an assembled whole. There was never any burden of building up patronage. The company had no competition. Subscribers or patrons were ready and waiting for service when the plant was completed, and there were times later when the company could not supply the demands. Its employees are trained in the everyday routine of business; the planning and preparation of records is a completed task, and as we have said, the expense for all this has been taken care of out of operating expenses which the ratepayers have contributed. Besides the plant was appraised and going operating concern as a whole. We think this intangible item of "going concern value" has been taken care of in the appraisal and the cost of operating expenses and that it was properly disallowed.

See the case of Los Angeles Gas & E. Corp. v. California R. Commission, *supra,* where practically all the cases on the subject are cited and reviewed.

Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission, *supra.*

[18] Rate making is a legislative and not a judicial function. The function of the court is to see that constitutional limitations are not transgressed by the rate-making body. We do not think they have been in this case.

The language used by Chief Justice Hughes in the Lindheimer Case (1934) 292 U. S. 151, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 352, 54 S. Ct. 658, is applicable here:

"It is not the function of the court to attempt to construct out of this voluminous record independent calculations to invalidate the challenged

rates. It is enough that the rates have been established by competent authority and that their invalidity has not been satisfactorily proved."

For the reasons assigned the judgment of the district court is reversed and set aside, and it is now *ordered* that the Louisiana Public Service Commission's Order No. 1530, made and dated March 2, 1935 (8 P.U.R. (N.S.) 1), be reinstated and made effective from its date.

PENNSYLVANIA PUBLIC SERVICE COMMISSION

Re Philadelphia Electric Company

[Securities Docket No. 216.]

Security issues, § 106 — Interest rates — Bonds.

Issuance of refunding bonds to bear interest at 3½ per cent instead of 3¼ per cent was authorized upon a showing that since authorization at the lower rate bond market prices had decreased to the extent that it would not be possible to sell 3¼ per cent bonds at par net to the company and that it was not practicable to accept a lower price as this would not produce sufficient cash to refund the existing funded debt.

[March 1, 1937.]

APPLICATION *for approval of issuance of refunding mortgage bonds; interest rate changed by supplemental order.*

By the COMMISSION: On December 22, 1936, petitioner filed application for our approval of the issuance of $130,000,000 principal amount of its first and refunding mortgage bonds, 3¼ per cent series, to be dated March 1, 1937, and to mature March 1, 1967, which were to be sold for cash to provide part of the funds necessary to retire all of the presently outstanding bonds upon which petitioner is liable. Inasmuch as the new bonds were not to have been issued until on or after March 1, 1937, the nominal date of issue, the selling price could not be specified in the petition, but the company stipulated that the net price to it would be not less than par, and prepared its schedule of cash resources, necessary for the debt retirement program, accordingly. The stipulated minimum price of par was based upon bond market conditions existing at the time of filing the application.

On February 2, 1937, the Commission approved the proposed bond issue, and authorized the company to sell the bonds to investment bankers at a price not lower than two points below the public offering price, and in no event at less than par.

However, since the date of the Commission's order, bond market prices have decreased to the extent that it would not now be possible for

petitioner to sell 3¼ per cent bonds at par net to the company. Accordingly, the company has two courses open to it in marketing its bonds. In the first place, it may accept a lower price for the 3¼ per cent bonds. This, however, is not practicable, inasmuch as the sale of the bonds would not produce sufficient cash to refund the existing funded debt of the company as planned.

The second alternative is to increase the coupon rate of the new bonds, thus sustaining the par minimum price. This is the course which the company proposes to adopt and therefore it has filed this supplemental application, praying that the Commission authorize it to fix the interest rate on its new bonds so that said bonds may be sold on March 11, 1937, the day of sale thereof, at the price required by our order of February 2, 1937, but not at more than 3½ per cent.

If the interest rate is changed from 3¼ per cent to 3½ per cent, the annual fixed charges on the new issue will be increased $325,000. Nevertheless, such fixed charges will be about $1,276,000 less than the fixed charges on existing funded debt paid by petitioner in the year ended October 31, 1936. Annual fixed charges on the new issue, assuming a price of par and a 3½ per cent rate, were earned 5.4 times in that year. Thus, the issuance of the bonds at the higher rate will not eliminate the advantages of the proposed refunding transaction, and the Commission will grant the authorization requested.

Upon consideration of this supplemental application, the Commission finds and determines that approval thereof is necessary or proper for the service, accommodation, or convenience of the public; therefore,

Now, to wit, March 1, 1937, it is *ordered:* That Philadelphia Electric Company be and it is hereby authorized to fix the nominal interest rate of the $130,000,000 of its first and refunding mortgage bonds, the issuance of which has been approved by us, so that on or about March 11, 1937, it shall obtain a net price of par or more for said bonds; provided, however, that such interest rate shall not exceed 3½ per cent per annum.

NEW YORK DEPARTMENT OF PUBLIC SERVICE, STATE DIVISION, PUBLIC SERVICE COMMISSION

Re Rochester & Lake Ontario Water Service Corporation

[Case No. 8369.]

Valuation, § 125 — Overheads — Land as basis.

1. No overheads should be allowed on land, p. 36.

Valuation, § 379 — Rights of way — Easements — Assessed valuations of adjacent property.

2. Assessed valuations of adjacent property are very little, if any, indication of the fair value of rights of way or easements of a water utility company in highways and along railroads, p. 38.

Valuation, § 379 — Right of way — Width of easement.

3. The actual width of the easement of a water utility, where given, should be used for valuation purposes, although it may be true that the company has the right to use a greater width for construction purposes, since the fact remains that the pipe must be contained within the width designated; still some value undoubtedly attaches to the right of access over adjoining lands and weight may be given to this factor and to all of the physical conditions in valuation, p. 38.

Valuation, § 413 — Weight of testimony — Right-of-way values.

4. More weight should be given to testimony of a local real estate man, familiar with real estate values, who justifies his estimates of right-of-way values by sales of property with which he is familiar than testimony by one who is not actually engaged in the sale of real estate in the community and whose judgment of values in certain sections is based upon conversations with other real estate men, p. 38.

Valuation, § 379 — Easements in streets — Front-foot values.

5. The value of easements of a water utility wholly contained in streets should not be based on the front-foot values of abutting property; although upon abandonment or relocation of a street the company's prior right might obviate the necessity of moving an existing pipe line, such easements have little or no market value, and it would be as logical, and perhaps more so, to assume that the easement in a street bears a relation not to the front quarter but rather to the rear quarter, p. 39.

Valuation, § 379 — Easements in public streets — Original cost.

6. Easements of a water utility in public streets, which are wholly unnecessary so long as the streets continue to be used by the public, and which have no sale value as such as they could not be sold except with the property as a whole, should not be valued at a figure in excess of original cost of acquiring such rights, p. 40.

Valuation, § 218 — Property not used or useful — Easements in streets.

7. Easements in public streets, which are wholly unnecessary so long as the streets continue to be used by the public, although a part of original cost, must be excluded from the rate base as not used and useful, p. 40.

Accounting, § 12.1 — Land and right-of-way easements — Determinations in rate case.

8. Determinations as to present value of land and the value of right-of-way easements in a rate proceeding are not to be construed as authorization for the entry of these items on the books of the company, but all such entries should be at the original cost of the respective items of property, p. 40.

Valuation, § 168 — Charges to original cost — Cost of obtaining customer — Agreement as to right of way.

9. An agreement providing for the delivery of water to a railroad and for the use of railroad right of way to lay pipes and mains is not a proper

item to be included in determining original cost, since water companies should not and do not have to pay for customers and the right of way is given a present value as required by law and included in the rate base, p. 46.

Valuation, § 69.1 — Determination of original cost — Payments to affiliated interests.

10. Whatever costs may have been incurred by a public utility company in acquiring agreements from affiliated interests are of no binding value in determining original cost of the property if no cost of contracts and rights obtained or of services rendered, other than what has been allowed elsewhere, has been shown, because they are not arm's length agreements, p. 46.

Valuation, § 117 — Bond discount.

11. Bond discount should not be allowed as a part of original cost of fixed capital, since cost is measured in money rather than securities and discount is an element in the cost of raising money, p. 47.

Valuation, § 124 — Overheads — Basis — Interest during construction.

12. Interest during construction is allowed on physical property and on organization but none on land, p. 47.

Depreciation, § 32 — Straight-line basis — Preferred to sinking-fund basis.

13. The straight-line depreciation method was adopted in preference to the sinking-fund basis for the purpose of determining depreciation, p. 48.

Depreciation, § 31 — Calculation — Lives of property.

14. Adoption of the ultimate rather than the average life which may be expected from units of property results in estimates of life being too high in most instances, p. 49.

Valuation, § 290 — Working capital — Cash balance — Reserve for interest and dividends.

15. Consumers should not be required to furnish funds to pay bond interest and dividends and also to pay the same in the return, as would be the case if a company maintained a cash balance sufficient to build up a reserve during the year to meet bond interest and dividends, p. 51.

Valuation, § 294 — Working capital — Cash balance.

16. Some cash balance must be maintained in the bank in order to keep a public utility company's credit good, which is a factor to be borne in mind in making an allowance for working capital, p. 52.

Valuation, § 250 — Consumers' contributions.

17. Contributions made by customers toward the expense of constructing utility property which is included in the company's operating property accounts should be deducted from fixed capital in determining a rate base, p. 52.

Return, § 115 — Water utility.

18. A water utility company should not be allowed a return of 7 per cent; it would seem that even 5½ per cent might be justified, p. 53.

Depreciation, § 26 — Annual allowance — Relation to accrued depreciation.

19. An amount should be allowed for annual depreciation in harmony with the accrued depreciation, p. 53.

Expenses, § 11 — Nonrecurring charges — Studies for water supply.

20. A charge for studies in connection with a possible water supply, representing expenditures of past years, should be eliminated from operating expense as nonrecurring, p. 55.

Expenses, § 92 — Rate case expense — Amortization.

21. Allowable rate case expenses were required to be amortized over a period of six years, p. 56.

Rates, § 135 — Comparisons — Different conditions — Payments for meters.

22. The fact that a municipality requires its water customers to purchase meters and to maintain them should be given consideration in comparing such rates with rates of a water company which furnishes and maintains meters, p. 57.

Rates, § 143 — Cost of service.

23. Rates of private water companies must be determined on the basis of the reasonable cost of service, including a fair return on the fair value of the property used and useful in rendering water service, p. 58.

Rates, § 625 — Water — Wholesale service to districts — Industries.

24. In comparing water districts rates for wholesale water with similar industrial rates consideration should be given to the fact that the former includes fire protection, much of the cost of which is in the wholesale price for water, whereas all fire protection for the industries is paid for through taxes in addition to the rate for industrial use of water by virtue of the fire hydrant charge paid by the municipalities, p. 59.

[March 9, 1937.]

INVESTIGATION *of rates, charges, or classifications of service for water sold and delivered by a water utility company; investigation discontinued and proceeding closed on the basis of a proposed settlement.*

APPEARANCES: Rochester & Lake Ontario Water Service Corporation: Russell H. Neilson, Chief Counsel, New York; Clarence P. Moser, Counsel, Rochester; A. W. Cuddeback, President, New York; W. R. Edwards, Vice President, Rochester; Alexander Russell, Vice President and General Manager, Rochester.

City of Rochester: Harold P. Burke, Corporation Counsel (by Geo. B. Draper, Deputy Corporation Counsel, and Abraham Edelstein, Representing Corporation Counsel), Rochester; Morgan D. Hayes, City Engineer, Rochester.

Town of Irondequoit: George R. Lunn, Jr., Town Attorney, Irondequoit; John Van Voorhis, Town Attorney, Rochester.

Town of Brighton: Edward M. Ogden, Town Attorney, Rochester; Samuel A. Cooper, Supervisor, Rochester; Charles A. Fitzmorris, Commissioner, Brighton-Monroe Water District, Brighton; Kenneth B. Keating, Attorney, Brighton-Monroe Water District, Rochester.

Town of Greece: Frederick J. Slater, Attorney for town, Rochester; Gordon A. Howe, Supervisor, Rochester.

Public Service Commission: Gay H. Brown, Counsel (by Russell B. Burnside, Assistant Counsel), Albany; Arthur H. Pratt, Chief Hydraulic Engineer, New York.

W. J. Edell, President, Citizens Utility Rate League, Rochester.

BURRITT, Commissioner: On October 23, 1934, this proceeding was begun by the Commission on its own motion as a result of the complaint of the mayor of the city of Rochester as to the rates, charges, and classifications of service for water sold and delivered in that city. About that time also certain informal complaints had been made by suburban residents served by the company, particularly those in the town of Irondequoit.

In the summer of 1934 an agreement had been reached between the city of Rochester and this company as to rates to be charged in the city. However, the Commission did not approve this agreement, chiefly on account of the form of the rate. Subsequently a letter was received from the city manager of Rochester, requesting the Commission to proceed with its investigation. The order of the Commission in this case was deemed broad enough to include all the issues then pending.

In all twenty-two hearings were held, between November 5, 1934, and December 18, 1936—nearly all in the city of Rochester. Twenty-two hundred and twenty pages of testimony have been taken and 74 exhibits submitted in evidence.

Just prior to the hearing on November 13, 1936, counsel suggested that the company would be willing to file reduced rates providing this rate proceeding be discontinued. Accordingly, the next hearing, which was scheduled for December 10th, was postponed to December 18th, to permit time for negotiations. During that period conferences were held between counsel for the water company and the engineering staff of the Commission's water bureau. Thereafter, counsel for the water company conferred with me, when final proposals were discussed. As a result of these conferences, and after reviewing the negotiations and proposals, I made the following announcement at the hearing in this proceeding in Rochester on December 18th:

"It is with satisfaction that, as a result of this investigation, I am able to announce that the Rochester and Lake Ontario Water Service Corporation has agreed to file new rates effective as soon as possible, making a reduction of about $24,000. A proposal by the company of a considerably less amount was originally made for wholesale districts only, but after negotiation with the Commission's engineer this amount was increased, so as to give every domestic customer a reduction of 25 cents in his quarterly bill, or $1 per year. Tapping fees for domestic customers are also to be discontinued.[1] The balance of the reduction will go to reduce wholesale rates in water districts. The company has also agreed to cumulative billing in these water districts, which meets the recent complaint of the town of Greece.

"If these proposals meet with the approval of the city of Rochester and

[1] For a complete statement of the rate reductions see report of the Commission's water bureau dated December 23, 1936.

the towns affected, I am disposed to recommend to the Commission the acceptance of the reduced rates as proposed, together with the discontinuance of this proceeding, as I am convinced from a preliminary casting up of the evidence that this amount is all and possibly more than the Commission could require, by order based on the evidence.

"This public announcement of the proposal for settlement is made at this time in order to give the city and the towns an opportunity to consider the matter and to express their views, before final action is taken by the Commission.

"A report will be written on the evidence, and findings made on the record to date as to the present value of land, rights of way, and easements, original cost of the used and useful property, accrued and annual depreciation, working capital, revenues and expenses, and other matters of testimony, excluding, however, any consideration of the theoretical items of reproduction cost and going value. Such a report will enable the public to determine the fairness of the proposed settlement.

"The company is to be commended for its attitude of coöperation in the interests of its customers — even though this settlement is proposed very late in the proceeding and probably partly because of the necessity for meeting a threatened new supply to its wholesale districts. The acceptance of the rates proposed by the company, if approved by the Commission, will remove the possibility of protracted and expensive litigation, and will permit the reductions to become effective immediately."

The chief advantage of the proposed settlement, at this late date, is that it will permit new and reduced rates to become effective almost immediately, and that it removes the possibility of protracted and expensive litigation over an order of the Commission. Moreover, it achieves all of the results that could be reasonably expected by continuing the proceeding to its final conclusion.

Counsel for the company made the following statement:

"This proposed settlement was agreed to by the company upon the implied understanding that the present proceedings would be dismissed. If for any reason the dismissal of these proceedings cannot be had, it is understood that the company reserves the right to withdraw its amending rate schedules putting into effect the contemplated reduction in rates, and further reserves the right to present such additional evidence in the way of rebuttal and further cross-examination of the Commission's witnesses, as it contemplated in the event the present case before the Commission would be continued."

The evidence presented includes that relating to the present value of the real estate, the value of rights of way, easements, and consents by the company and by the city of Rochester; original cost presented by the company and checked by the Commission's engineers and accountants; reproduction cost presented by the company and by the Commission's engineer; depreciation by both the company and the Commission's engineer; revenues and expenses, which have been checked; working capital by the company and by the Commis-

sion's engineer; cost of financing and going value by the company, and allocation by the company of fixed capital and revenues and expenses by classes of service. The only remaining testimony which might have been presented by the company to complete its case is certain rebuttal testimony on land, reproduction costs, and depreciation together with certain cross-examination of the Commission's engineers.

The company is to be commended for its attitude of coöperation with the Commission in this proceeding, as well as for its desire to settle the proceeding upon a reasonable basis without the expenditure of further time and money. It is particularly worth noting that the discontinuance of the investigation at this time eliminates entirely any further consideration of the theoretical and continually changing element of reproduction cost of the property, as well as of that nebulous factor of going value. While some time has already been spent on these phases of evidence, I believe that their final elimination by the company from consideration in this case is a step forward. The evidence tends to show that reproduction cost would exceed original cost. The company should receive credit for being willing to forego further consideration of these elements and for proposing to make a prompt reduction in rates and waiving its rights for further trial of the case in an effort to satisfy its customers.

The original cost of the property was developed by the company, in accordance with the usual procedure. This was submitted on September 5, 1935, and received as Exhibit 24. The time occupied by the company and the Commission in the preparation of the inventory and the determination of original cost has not only not been wasted but has been productive. By the adoption of the report in this proceeding the original cost of this property, as of the dates when its various elements were devoted to public service, will be definitely determined and on record. On November 25, 1936, the company accepted the order of the Commission requiring the preparation of a continuing property record, and the studies and exhibits in this proceeding will enable the company to proceed with that program with the minimum of additional work and expense.

Customers of the company and the city of Rochester may now have the assurance that the actual original cost of the property of the Rochester and Lake Ontario Water Company is definitely known and on record, that rates are not based upon inflated write-ups, and that they will be paying the lowest rate for water consistent with a fair return on actual investment in property used in the public service. Again, the provisions of the Public Service Law have produced results. Regulation has not been thwarted but has been effective.

For the purposes of summarizing the record and making available to all concerned the pertinent features, with particular respect to the original cost of this property, the following is submitted:

Description of Property

The plant of the Rochester & Lake Ontario Water Service Corporation consists of supply works located on

the shore of Lake Ontario just west of the mouth of the Genesee river; two main transmission lines of cast iron pipe which transmit the water through a loop to the city of Rochester, connecting with a continuation of the transmission line to the southeast; and the necessary distribution pipes, hydrants, and other accessories in the area served with water.

The supply works which are at Charlotte, in the town of Greece, just outside the limits of the city of Rochester, consist of an intake pipe line extending into the lake about 4,000 feet, a pumping station with low lift steam and electric pumps which raise the water to sedimentation basins, from which it is pumped by high lift steam and electric pumps through pressure filters, consisting of 22 steel tank units having a nominal daily capacity of 500,000 gallons each, into the piping system. At various stages in the operation of the Charlotte plant the water is treated with chemicals to assist in the purification process. During the year 1935 the sedimentation capacity at this plant was doubled, but the new basin is not included in the original cost as of December 31, 1934, but is incorporated in the additions. An average of about 7.5 million gallons of water per day was produced in the year 1935. At Charlotte, beside the pumping station and filtration house, there are other service buildings and several dwellings occupied by the operating employees of the company.

The two transmission lines practically encircle the city of Rochester. One main line leads from Lake Ontario to down-town Rochester over the right of way of the Buffalo, Rochester and Pittsburgh Railway (now Baltimore & Ohio Railroad), and thence easterly over the New York Central Railroad right of way. The lines join at a point in the southeastern part of the city where two large storage tanks are located on a high elevation known as Cobbs Hill. From these reservoirs the transmission line continues to East Rochester and on to Fairport, with a branch extending in a southerly direction to the village of Pittsford. The two standpipes at Cobbs Hill have an elevation about 400 feet above the level of Lake Ontario. One has a storage capacity of 2,600,000 gallons and the other of 5,800,000 gallons. In addition, there is a 200,000-gallon elevated storage tank in the most westerly portion of the distribution system, near the town of Gates. At Cobbs Hill there is an office, shop, and garage.

There are six booster stations with electrically operated pumps at various points in the system, which are used to maintain the water pressure in the system. The total length of transmission main is 38.65 miles and there are about 88 miles of cast iron pipe distribution mains from 4 inches to 12 inches in diameter and some wrought iron pipe of 1 inch to 2 inches in diameter. The transmission system consists in the main of the 2-line loop of 20-inch cast iron pipe and the 12-inch extension to Perinton.

As of the date of the inventory, December 31, 1934, there were 13,452 company-owned meters in service and 712 company-owned fire hydrants, with 439 fire hydrants owned by municipalities, which were connected with the water company system. The main business office of the com-

pany is in rented quarters in the Triangle building, Rochester.

In the city of Rochester and town of Irondequoit the company not only serves customers directly from its own lines but in addition serves customers through pipes owned by the municipalities, in connection with which a contract exists by which the company pays a rental for such use. The company also serves several municipalities and water districts wholesale. One of these customers, the village of East Rochester, has recently built its own water supply works and ceased purchasing water from the company in the latter part of 1935. The estimated annual loss in revenue for this reason is about $13,000 per year.

The distribution of revenue and customers for the year 1935 was as follows: [Tables omitted.]

Balance Sheets

The balance sheets of the company taken from the annual reports of the company to the Commission are shown in Tables IV and V for the years 1933, 1934, and 1935. The property of this company includes both the Rochester and Clyde plants so no balance sheets are available for the Rochester property separately. [Tables omitted.]

Assets.

The total fixed capital for the Clyde plant at the end of the year 1935 is $107,359.61. "The stock of the Clyde Water Supply Company was purchased in January, 1928. The bonds retired and the company consolidated into the Rochester & Lake Ontario Water Service Corporation. The fixed capital was taken over and is now being carried on the books at historical cost." The total 1934 fixed capital for the company was $5,162,526.32 made up of Rochester plant $5,055,988.31 and Clyde plant $106,538.01. The fixed capital of the Rochester plant is stated to be on the basis of an appraisal dated December 1, 1927, and subsequent additions at cost (see page 200-a Annual Report to Commission). This is further discussed in the portion of this report covering original cost.

Accounts receivable includes bills unpaid, payments to others, and unbilled service rendered. Prepayments includes prepaid taxes, insurance, and license plates. Miscellaneous assets includes the special deposit with the trustee to cover preferred stock for redemption. On December 31, 1934, this was $9,268.20. Unamortized debt discount and expense is on account of the first mortgage 5 per cent gold bonds due in 1938.

Liabilities.

The stock includes 2,000 shares of no par with a stated value of $50,000 and 8,333 1/3 shares of preferred stock issued in 1928 called for redemption (see contra entry special deposits under miscellaneous assets).

Long-term debt includes an amount at face value outstanding at the end of the year of 5 per cent first mortgage bonds of Rochester & Lake Ontario Water Company dated March 1, 1903, and due March 1, 1938, assumed by Rochester & Lake Ontario Water Service Corporation.

Advances from affiliated companies are from the New York Water Service Corporation.

Depreciation or retirement reserve "is based on judgment of accounting officers after a study of years past experience on these properties and which has been approved by the board of directors." (Exhibit 4.)

Tapping charges consist of charges for installing services from the main to the curb. Miscellaneous reserves includes reserves for uncollectible accounts $4,971.08 and reserves for retirement of construction equipment, $3,270.66.

Reconciliation of Fixed Capital with Original Cost

The company presented in Exhibit 24 (page 3) a reconciliation of what it termed "unadjusted original cost" as shown by the books to fixed capital, as shown in the report to the Public Service Commission and also in the books at December 31, 1934, this portion of Exhibit 24 being as follows: [Table omitted.]

This table shows that the principal difference between the unadjusted original cost and the books was due to the entry on the latter in 1925 of an appraisal of the property of the late Nicholas S. Hill, Jr., amounting to $1,846,390, as of January 1, 1922, and subsequent adjustments based on appraisal of Public Works Engineering Corp., dated December 1, 1927.

Exhibit 24 also contains a reconciliation of the claimed original cost per books to the original cost as determined in the instant proceeding. The following is abstracted from page 2 of Exhibit 24: [Table omitted.]

Land

More than one-third of the entire testimony, or nearly 800 pages, and 10 out of 74 exhibits, concern the value of land, rights of way, and easements. In spite of the fact that assistant counsel cross-examined the city's real estate expert witness meticulously and at length in November, 1935, and stated (S. M. 1253) "that is all," at the close of the hearings in December, 1936, after a whole year had elapsed, he asked for another day for cross-examination and rebuttal testimony on real estate.

The claims of the parties as to the present value of both land and rights-of-way easements, as of January 1, 1935, are as follows:

By the company	$145,697.00
By the municipalities	81,874.00

These claims for land, and those for easements, require different treatment and will be considered separately. The testimony on behalf of the company as to the value of land owned in fee was given by Lester P. Slade, who testified that he has been engaged in the real estate business since 1915, has done a good deal of appraisal work, and is familiar with real estate appraisals in the city of Rochester and adjacent territory. He also stated that he is an officer and member of committees of various real estate organizations and is appraiser for several insurance companies.

The rights of way which the company owns were appraised by George A. Stephan, a real estate broker of Buffalo, who testified that he has been engaged in real estate business for twenty years and who made the appraisals in Case No. 8233—Western

New York Water Company. He also testified to the following qualifications: he is a director and former officer of the Buffalo Real Estate Board and member of other associations; he was formerly connected with the Kinsey Realty Company which was a large real estate operator around Buffalo and personally handled sales, had charge of sales campaigns and the pricing of lots, largely in the Buffalo territory; since May, 1932, he has been engaged in the general brokerage business operating his own company; he has appeared as an expert witness in a great many condemnation proceedings; his familiarity with real estate prior to just recently has been wholly in the city of Buffalo and vicinity in Erie county, but he familiarized himself generally with the real estate situation in Rochester by talking with numerous brokers actively engaged in the business with whom he was acquainted.

The testimony on behalf of the city of Rochester was given by Linus S. Appleby, a licensed real estate broker engaged in real estate business in Rochester for approximately twenty-six years. He stated that he was president and general manager of the General Realty Service, the largest subdivision development company in Rochester, and was treasurer of the Alliance Realty Corporation for a number of years; that these corporations operated numerous tracts in and around Rochester; that he had purchased sites for new schools and additions for the board of education of the city of Rochester from 1914 to 1926, was land agent for the Rochester Public Library Board for about fifteen years, is an appraiser for the United States Government under the Home Loan in Rochester, has appraised land for the state of New York, for the state insurance department, for the county of Monroe, the town of Brighton, the city of Rochester, the New York Central Railroad, Lehigh, and Baltimore and Ohio railroads on grade crossing eliminations.

It appears that both Mr. Appleby and Mr. Slade are equally well qualified to appraise land in the city of Rochester and its vicinity but because most of Mr. Stephan's experience has been in connection with land in the city of Buffalo and vicinity, it is my opinion that other factors being equal, Mr. Appleby's judgment as to values of rights of way and easements in Rochester and vicinity must be given rather more weight because of his better knowledge of local conditions.

The real estate appraisers accepted the land areas and easement lengths shown in Exhibits 2 and 3 submitted by the company.

The claims of the company and of the municipalities as to the present-day value of the land and rights-of-way easements owned by the company have been summarized by classes in Table VI together with the original cost so far as obtainable.

TABLE VI

LAND AND RIGHTS-OF-WAY EASEMENTS

	Original Cost	Claims of Present Value		
	Exhibits 24 & 24A	By Company	By Municipalities	Allowed Herein
Land				
Land owned in fee	$33,099	$51,768	$38,875	$45,845
Rights-of-way Easements				
Easements for transmission mains in railroad rights of way	[1]	63,468	28,417	40,083
Easements in other private land	5,763 [2]	5,280	3,125	3,400
Easements in streets	1,498 [2]	25,181	11,457	-0-
Total easements	$7,261 [2]	$93,929	$42,999	$43,483
Total land and rights-of-way easements	$40,360 [2]	$145,697	$81,874	$89,328

[1] Original costs of easements claimed by the company to have been included in the unallocated costs by payments to S. Q. Mingle et al. (Ex. 49).

[2] Claimed by the company to be incomplete since certain items are included in unallocated costs as per Note 1.

The easements in the railroad right of way are for the transmission mains and were acquired in 1903 by the original company from the New York Central Railroad Company and the Buffalo, Rochester & Pittsburgh Railroad Company. The easements over other private lands and in public streets are for both transmission and distribution mains. For easements in public streets, the company has claimed value only in those instances in which the easement was obtained prior to the dedication of the street. It is the company's contention that irrespective of the fact that these streets may now be public, these easements still have a value since in the case of a relocation of the street, as for instance happened in connection with Hillside avenue (S. M. 496), the company's pipe line could not be disturbed. This would also be true in the case of a change in the line of the street for subway or canal crossings.

[1] The company claims that the values of land as determined by Messrs. Slade and Stephan are bare cost only and that to them should be added overheads made up as follows (Exhibit 29):

Legal fees and title company report	2½%
Engineering and survey	2
Administration and general expenses	2
Interest during construction	10½
Total	17%

In conformity with the decision in the Minnesota Rate Cases (1913) 230 U. S. 352, 57 L. ed. 1511, 33 S. Ct. 729, 48 L.R.A.(N.S.) 1151, Ann. Cas. 1916A, 18, I have allowed no overheads on land and therefore exclude this claim of the company in its entirety.

Land Owned in Fee

Both witnesses for the company and the city inspected the property under consideration and the surrounding property in the neighborhood and reviewed what sales they could find in the neighborhood. Due to lack of real estate activity in some localities, it was necessary for both to rely on sales made some years ago and in some cases to use value of land at some distance from the property which they

were appraising. In order to convert these values into present-day market values, they relied upon their judgment and general experience.

For convenience I have designated the various parcels by numbers: [Description of various parcels of land and factual findings of value, without rulings on legal principles, omitted.]

Easements and Railroad Rights of Way

These consist of rights secured by a predecessor company from railroad companies to construct, operate, and maintain pipe lines within railroad rights of way. Mr. Stephan, for the water company, appraised the right of way on the New York Central Railroad property by breaking it down into numbered zones and allocating to each a value per foot (S. M. 289). Mr. Appleby followed the same procedure.

With respect to the easements in the Buffalo, Rochester and Pittsburgh Railroad, for convenience it was divided into two zones designated as Zone A in the town of Greece from Venice to Stonewood avenue, and Zone B in the city of Rochester from Stonewood avenue to Driving Park avenue.

Mr. Stephan stated that he generally used the method of breaking down actual sales of which he had knowledge into a square foot unit price which through the city of Rochester he applied to the actual width of the right of way on the theory that the additional rights which the water company has under the easement are of sufficient value to justify the application of the square foot price in fee to the 6-foot width. He checked his judgment by a study of assessed values of adjacent properties which he found to be in substantial agreement with the prices which he used (S.M. 293). There were exceptions in which he used lesser valuations because of certain "burdens" which he believed existed on the easement (S.M. 295). One of these so-called "burdens" was due to the fact that in one of the zones the railroad was on a high embankment and the pipe lines are located on a slope (S.M. 334). With respect to the portion of the easement in Pittsford, Perinton, Greece, Brighton, and Penfield, he generally used a 30-foot width of easement as a basis of value on the theory that the company had all of the benefits which would accrue from such width and none of the burdens found in the city or in the urban zone (S.M. 298).

In connection with the right of way on the Buffalo, Rochester and Pittsburgh Railroad, he followed substantially the same methods, but since this easement was granted for a term of fifty years, of which thirty-two had already elapsed, he depreciated the value of this easement over one in perpetuity, by 82 per cent.

Mr. Appleby assumed an easement width of 10 feet where no specific width was given, on the theory that this was sufficient for excavating and laying a 20-inch main. He contended that there were a number of stretches where the water company owned less than 10 feet and that the company itself had demonstrated that a 20-inch main could be laid in a 5-foot or even in a 4-foot strip. Where a specific width was provided for the easement, he used that width. He contended

that assessed valuations have no bearing on fair value. He likewise considered sales in the vicinity and allowed full fee value for the width he adopted. In a number of cases he applied an adjustment to the fee value of adjacent land before applying it to the width of the easement. He also used 6 feet for a considerable stretch. He admitted that the rights given by the railroad company to use parts of the adjoining land of the company for construction purposes affect the value of the easement, but not beyond the figure which he had placed upon it.

[2, 3] It is my opinion that assessed valuations of adjacent property are very little, if any, indication of the fair value of rights of way or easements in highways and along railroads. With respect to the width of the easement, I think that where the actual width, such as 6 feet in the city of Rochester, is given, that width should be used. It may be true that the company has the right to use a greater width for construction purposes, but the fact remains that the pipe must be contained within the width designated. Some value undoubtedly attaches to the right of access over adjoining lands for the purpose of laying and maintaining the pipe, but certainly this value is not equivalent to a 30-foot width at the full fee value of the land. I have given weight to this factor and to all of the physical conditions in the values which I adopt.

In Table VIII are indicated the various linear foot prices testified to by the witnesses of the company and the city, together with the unit prices which I will allow which, when multiplied by the linear foot, as testified to by the company, will give a total value for these easements. [Table omitted,]

There is no record of the original cost of these easements, and no such cost appears on the books.

Easements in Private Land Other Than Railroad Rights of Way

This group of easements has been divided into rights of way for transmission mains and rights of way for distribution mains. It appears that all easements were granted in perpetuity. Both witnesses, Mr. Stephan for the company and Mr. Appleby for the municipalities, valued these easements at a unit price per foot. Originally there were differences between Mr. Stephan and Mr. Appleby, with respect to the lengths of some of the easements but subsequent testimony eliminated these differences and the witnesses are now agreed as to lengths. Stephan values the easements at $5,280, $3,941 of which is for transmission mains and $1,339 for distribution mains. Appleby's value was $3,127, of which $2,137 was for transmission mains and $990 for distribution mains. Since the amount of money is small, the discussion is confined to the general methods and the credibility of the witnesses. Both witnesses testified that they appraised only the land value and not any structures or pipe lines on the land. Mr. Stephan submitted Exhibit 5 showing his appraisal of these easements. Mr. Appleby's appraisal was submitted in Exhibit 31.

[4] In considering the testimony of Mr. Stephan, I have borne in mind that he has not been actively engaged in the sale of real estate in Rochester

or its vicinity since 1920 (S.M. 131). Also, that his judgment of values in certain sections was based upon conversations with other real estate men (S.M. 156). He presumed that their knowledge was based on general conditions and admitted that it was quite possible that their knowledge was just an opinion. He also presumes that their sales were four or five years ago (S.M. 157). He admitted that the men with whom he talked had no specific information concerning recent sales which would have any bearing on the values of property today. He further testified that he had no specific sales in the immediate vicinity of the right of way in Pittsford (S.M. 165). With respect to all other territory where rights of way are located he had sales of real estate in fee but not sales of rights of way as such.

Appleby, on the contrary, being a local real estate man, is more familiar with real estate values in and about the city of Rochester and since he justified his estimates by sales of property with which he was familiar, I have given his testimony more weight. After a detailed study of each grant and giving due consideration to the testimony with respect to each right of way, I have come to the conclusion that a fair and reasonable present-day value of the rights of way in private land does not exceed $3,400, $2,300 of which represents the value of transmission rights of way, and the remaining $1,100 the value of distribution rights of way.

Easements in the Streets

[5] Stephan testified that he arrived at the value of the 29 easements wholly contained in streets by basing it on the front foot values of abutting property and usually used the application of a rule which he calls 4–3–2–1. He also used the assessed valuation of abutting property as a check and found that he was very close. Since Stephan used this 4–3–2–1 rule in numerous cases, its method of application is discussed below. Stephan testified (S.M. 192, 193):

"It is self-evident that a lot, the value of a lot, the front portion of it, is greater than the rear portion per square foot or unit of that lot, and that has been worked out in a rule on the basis that the first 25 per cent of the lot in depth represents 40 per cent of the total value of the lot; that the next 25 per cent represents 30 per cent of the value of the lot, and the third 25 per cent represents 20 per cent of the value of the lot, and the latter quarter, 10 per cent of the value of the lot, making a total of 100 per cent. The application of that theory to the valuation of the street and easement is this: that the value of the land in the bed of the street has some relationship to the value of the abutting lands, and I have applied the value which I find for the third quarter of the lot to an equivalent width in the bed of the street.

Now, if the lot were 120 feet deep and the street were 160[2] feet wide, that would mean that half of the street would have the same value as the front quarter of the lot, each being a 30-foot strip. If the street is wider than 60 feet, or the lot varies from 120 feet in depth, I worked out a table which gives a percentage of the depth

[2] So in the minutes. Probably should be 60 feet.

which would correspond to any portion that varied from those standard depths."

While there may be some merit in the company's contention that if a street be abandoned or relocated the company's prior right would obviate the necessity of moving an existing pipe line, it is true also that such easements in the streets have little or no *market* value. Therefore, in my opinion, this rule is not necessarily a measure of a fair value of easements in streets. It would be as logical and perhaps more so, to assume that the easement in a street bears a relation not to the front quarter but rather to the rear quarter. The effect of granting an easement in front of the portion of land does not necessarily destroy the frontage value. On the contrary, it may increase such value. It may be assumed that the frontage has now been moved back by the width of the easement granted, in which case the loss is actually at the rear of the property and not at the front.

For streets wider than 60 feet, Stephan used a 30-foot width and on streets narrower than 60 feet he used half of the width of the street. The 30-foot width is based upon his judgment as to the width which would be necessary on which to lay pipe. He testified that if the company were going out to buy a strip of land through virgin country, 30 feet would be the average width acquired. He admits that the company has used less than 20 feet in some instances (S.M. 196).

Mr. Appleby on the contrary has used right-of-way widths of from 6 to 10 feet and justifies his use of this narrow right of way by showing that this company has actually purchased and used right of way as narrow as 4 or 5 feet.

Mr. Stephan allowed $13,022 for the value of easements in streets for transmission mains and $12,159 for distribution main easements, a total of $25,181. Mr. Appleby places a value of $5,081 on the transmission rights of way, and $6,376 on the distribution rights of way, a total of $11,457. The original cost of these easements as shown in the company's Exhibit 24, is $1,320.48 for transmission rights of way and $177.39 for distribution rights of way, a total of $1,497.87. The company claims that this cost is incomplete and that the costs of certain rights of way in streets are included in unallocated costs.

[6–8] The company asks us to include in the rate base for easements in public streets, which are wholly unnecessary so long as the streets continue to be used by the public, and which have no sale value as such as they could not be sold except with the property as a whole, a sum more than 16 times as great as the amount that these rights originally cost the company. There is much reason for disallowing the full amount as a claim for property no longer used and useful. However, it may fairly be assumed that they were necessary when acquired and it may be that they still would have some value in the event that the streets should be abandoned or relocated.

Certainly such value does not exceed the original cost of acquiring such rights. Since owners from whom such rights were acquired were in nearly all cases prospective users of water, it is very unlikely that the company ever paid them anything. In

fact they may even have contributed to the construction. The necessary costs, therefore, did not exceed those incident to contacting the owners and drawing and filing the necessary papers. So, I conclude that the value of these rights does not exceed the original cost of acquiring them, or about $1,500.

It does not follow, however, that the company should be permitted to earn on this value unless these easements in public streets are necessary and used and useful. Obviously, they are neither necessary nor used and useful in public streets, since the company has franchises and since the laying of water pipes is a public use of streets. The entire amount, though a part of original cost, must be excluded as not used and useful.

The determinations herein as to present value of land and the value of rights-of-way easements are not to be construed as authorization for the entry of these items on the books of the company. All such entries should be at the original cost of the respective items of property. The company has been directed to file a continuing property record and to price such an inventory at original cost in Case No. 8974 and accepted the order on November 25, 1936. When this is received proper entries on the company's books will be determined.

Original Cost of the Property

The early history of this company throws some light on the original cost of the property. The Rochester & Lake Ontario Water Company was organized December 30, 1902, to supply water to the villages of Brighton and Fairport and to the towns of Brighton, Gates, and Greece all adjacent to Rochester in Monroe county (Exhibit 39). At its first meeting on January 16, 1903, this company acquired certain contracts for the purchase of water and agreements for the use of the rights of way of certain railroads to lay water mains, from Sampson Q. Mingle (Exhibits 25, 25A, and 27). It also accepted a proposition of the American Pipe Manufacturing Company (Exhibit 26) to construct a water supply system, and such construction was begun in July, 1903. Both these acquisitions were paid for in part by the issue of stocks and bonds at discounts. There was apparently a community of interest between Mingle, the American Pipe Company, and the early sponsors of the water company.[3] The first sales of water were said to have been made in January, 1905.

From 1905 to 1917 portions of various towns adjacent to the city were annexed to Rochester, which was said to involve some relocation of mains, valves, etc. There was also some litigation with the city in these early years. At the present time approximately one-half of the company's customers are located in the city of Rochester and the other half outside the city. Many water districts have also been formed outside the city.

On November 30, 1927, control of the company passed to the New York Water Service Corporation through acquiring ownership of the stock. About that time also a considerable

[3] The early history of this company was quite similar in many respects to that of the Western New York Water Company. For a more complete discussion of early conditions and what was done see report of investigations of that company in Case No. 8233.

amount of new construction was done for the company by the J. G. White Company, $535,000 of treasury bonds being pledged to secure notes given to that company (Exhibit 53). On January 26, 1928, the Clyde Water Supply Company was consolidated with the Rochester plant to form the Rochester & Lake Ontario Water Service Corporation. This latter plant, however, is not included in the present investigation.

These facts have a bearing on the determination of original cost and suggest some of the matters necessary to be determined, especially in relation to the item of "unallocated costs."

Early in the proceeding the company was directed to show: (1) whether or not the book cost represents the original cost of its physical property used and useful in the public service; (2) a list of physical property existing December 31, 1934, which it acquired from another public utility and which does not appear on its books at the original cost of the property; and, (3) the original cost of all its properties, taken from records where known, and where unknown, estimated. "Original cost" was defined as meaning, "The actual money cost (or the current money value of any consideration other than money) at the time when the said property was first devoted to the public service whether by the respondent company or a predecessor public utility."

In response to these directions the company stated that its ledger balances in the fixed capital accounts, as of December 31, 1934, did not represent the original cost of its property as defined by the Commission. Although the company protested that the said direction was arbitrary, unjust, and unreasonable, and reserved any and all objections and its rights with respect thereto (S.M. 544–547), it did develop and present to the Commission an inventory of all of its physical property used and useful as of December 31, 1934, priced at original cost, as directed. This was presented on September 5, 1935, as Exhibit 24 (S.M. 549), and was testified to by Richard Wirtz, an accountant of the company. The determination of this original cost was made as the result of a review of all the ledgers, construction records, vouchers, and journal entries since the original organization of the company. It required an analysis of all the construction expenditures together with their segregation into the various operating property accounts by the years in which the property was put into service. All the property was segregated by years except the accounts of meters and services, which were lumped in one sum, it being testified by Mr. Wirtz that to determine the years of the various meter installations would take more time than would be justified by the results. The inventory and original cost of the company was checked by the Commission's engineers and accountants.

It was necessary to estimate certain items amounting to $28,442.98. These were charged to the respective accounts and the purchase price of the identical property appearing on the books was retired. This portion required to be estimated was a very small percentage (less than one per cent) of the total original cost of the property. Retirements were made as

of the original cost of the retired items.

All of the physical property included in the inventory together with its original cost were shown and allocated by accounts. The other dollars on the books of the company were shown as "Unallocated Costs," "Estimated Interest during Construction," and "Discount."

The amount of $2,825,000 was included under the caption "Unallocated Costs" in the first tabulation (Exhibit 24). This amount was said to consist of payments made in cash, in stock, and in bonds to Sampson Q. Mingle, for certain rights of way, contracts for the sale of water, and franchises to serve water in the villages of Charlotte, Despatch, and Fairport. The total amount also included 6,250 shares of fully paid capital stock of the company, claimed to have a par value of $100, which was issued to the American Pipe Manufacturing Company in accordance with the terms of a construction agreement. In Exhibit 24 all stocks and bonds are included at their par.

The "Estimated Interest during Construction" item is based on a reallocation of the actual interest expenses incurred by the company in connection with its funded debt. These were estimated in the years from 1903 to 1926, inclusive, but thereafter they were not shown separately since the books of the company actually contained a segregation of interest applied to construction by accounts. The interest for the years 1903, 1904, and 1905 was stated to have been estimated at 6.36 per cent (S.M. 566) based on the actual bond interest paid during the original construction period (S.M. 1442). Based on Exhibit 24 interest does figure 6.36 per cent for the year 1903 as testified but for the year 1905 it figures 5.9 per cent and includes a certain portion of the construction work done in 1903 and 1904 but entered as of 1905 when put into operation (S.M. 1443). For the years 1906 to 1927 it is one per cent based on a rate of one-half per cent per month for an estimated construction period of two months (S.M. 567). After 1928 there is no charge under the interest item but interest was charged on the books of the company directly to the respective operating property accounts on the basis of one-half per cent per month, however, with no interest for periods of construction of less than thirty days (S.M. 1453) and with no interest charged on accounts for meters or services.

Under the caption of "Bond Discount" the company originally set up what it alleged to be 7½ points of $1,200,000 worth of bonds issued to the American Pipe Manufacturing Company at 92½ per cent of the face value of bonds in payment for construction. The company contended that these were shown on the books as a charge to fixed capital and that the amount represented the actual cost to the company at the time the plant was built.

At the last hearing in this proceeding on December 18, 1936, the company submitted Exhibit 24A, which is a revision of its original cost Exhibit 24. Aside from a few minor adjustments developed in the testimony in cross-examination, the principal revision in Exhibit 24A is in "Unallocated Costs" which the company's witness stated was due to the fact that the in-

vestigation to determine the money value of the securities at the time the property was first devoted to public use, as directed by the Commission, had not been completed at the time of the original presentation of the exhibit. Exhibit 24A purports to show the equivalent money value of the securities originally issued. This revision results in a total reduction in the claimed amount of unallocated costs from $2,825,000 to $1,079,975 (S.M. 2167).

Witness Heyser testified that his investigation showed that the aggregate principal amount of $324,000 in bonds paid to Mr. Mingle in 1904 and 1905 had an actual market value at the time of $92.50 per hundred, or $925 per thousand dollar bond. Applying this figure to the principal amount of bonds produces a sum of $300,625.

Likewise, Mr. Heyser testified that his investigations showed that the stock delivered to Mr. Mingle in 1903 had a money value, as of the date the property of the company was first devoted to public service, which was taken as January, 1905, of $30 per share. He said that this was based on sales of stock made at that time. He then applied the $30 to the 18,685 shares of stock delivered to Mr. Mingle, which produced the sum of $560,550.

Adding the so-called money value of the bonds and the stock amounting respectively to $300,625 and $560,550, together with $31,300 in cash, which the witness testified was paid, gives a total of $892,475, which the witness testified in his opinion represents the money value of the $1,868,500 cash and securities paid to Mr. Mingle for the property.

In a similar manner the witness found that the 6,250 shares of stock delivered to the American Pipe Manufacturing Company in 1903 had a money value of $30 per share, which gives $187,500 for this stock. This amount added to the previous total equals the $1,079,975 which the company now proposes to substitute for the $2,825,000 shown under "Unallocated Costs" in Exhibit 24.

In connection with this exhibit I asked counsel for the company the following question:

Q. You want the Commission to consider the revised total of $4,612,046.55 as the company's figure of original cost for this property?

Mr. Neilson. That is correct.

This being the last hearing in the proceeding and because of the proposed settlement of the case, the company's witnesses were not cross-examined on this exhibit although the right to do so was reserved in the event that the proposed settlement should not be finally approved.

The original (Exhibit 24) and the revised claims of the company (Exhibit 24A) for the original costs of its property are shown in Table IX. [Table omitted.]

Allocated Costs

Organization.

The company includes in Exhibit 24 $11,174.28 in Account 301 for Organization. The witness Wirtz, who prepared this exhibit, testified that it included only the actual costs of organization of the original company in 1903, 1904, and 1905 and in accordance with the Commission's Uniform System of Accounts none of the costs

of the reorganization of the company in connection with the consolidation of the Clyde plant in 1929 were included. On cross-examination, however, he admitted that $4,001.38 relates to stock and bond expense and would not be properly chargeable to the Organization account under the Commission's Uniform System of Accounts (S.M. 1428). This would leave only $7,172.90 chargeable to this account. This is made up of lawyers' and notary fees, engrossing and binding of minutes, stock books and miscellaneous expenses amounting in all to $2,926.19 and, also, a charge for defending the company against a law suit entered into by the city which finally established the right of the company to lay water pipes across streets along the railroad right of way and to sell water to the railroad. This latter charge, amounting to $4,246.71, is in my opinion debatable. However, since the record is inadequate to reach a final conclusion in regard to it, for the purpose of this proceeding, I will allow it together with a proportional share of the interest. The total amount of $7,629 is allowed for Organization.

Physical property.

In Exhibit 24A there are included all the changes in Exhibit 24 necessary to reflect the original cost of the physical property of the company. This involved changes in three accounts only, *viz.*, Boiler Plant Equipment, Transmission Mains, and Distribution Mains. These changes result from errors brought out by cross-examination and from additional information.

The reduction of $1,940.53 in Account 313, Boiler Plant Equipment, results from charging this amount to the depreciation reserve and crediting this account by the same amount, for the dismantling of two boilers in 1928. These had not been retired as they should have been. The reduction of $243.93 in Account 321, Transmission Mains, reflects additional retirements and additions (Exhibit 51) due to relocation of mains, together with a change in the unit price of an 8-inch main installed in 1905, from $1.04 to $1.03 per foot. In the Account 322, Distribution Mains, the reduction is $2,429.39 and is made for the same reasons as in Account 321.

The details of these changes and the reasons therefor are set forth in Exhibits 24A, 50, and 51 and in the testimony (S.M. 2169–2174). With these changes totaling $4,613.85, the amount of $3,337,793.33, having been checked by the Commission's engineers, is found to be the original cost of the physical property.

Unallocated Costs

The alleged payments of $2,825,000, par value of stocks and bonds plus a small amount of cash shown in Exhibit 24 and of $1,079,975, claimed to be the current money value of the same at the time of payment, as shown in revised Exhibit 24A, were made up as follows:

Payments to	Exhibit 24 Par Value			Exhibit 24A Current Money Value		
(1) Sampson Q. Mingle						
325—$1,000 Bonds	@ $1,000	=	$ 325,000	@ $925	=	$300,625
2,480 Shares Stock	@ 90	=	223,200	@ 30	=	560,550
16,205 Shares Stock	@ 100	=	1,620,500			
Cash			31,300			31,300
Totals			$2,200,000			$892,475
(2) American Pipe Manufacturing Co.						
6,250 Shares Stock	@ $100	=	$ 625,000	@ $30	=	$187,500
Total Unallocated Costs			$2,825,000			$1,079,975

[9, 10] For these payments to Mingle and the American Pipe Manufacturing Company which the company claims should be added to the cost of the allocated items (*supra*) to show the true original cost of the property to this company, it claims to have received the following (Exhibits 25, 25A, 26, 27):

(1) An agreement between Mingle and the New York Central Railroad Company providing for the delivery of water to the latter and for the use of its right of way to lay pipes and mains.

The agreement of the railroad company to take water from the water company was undoubtedly as valuable to the railroad as to the water company. Even if it had any specific value at that time, it has none now. The railroad is a regular customer of the company. Water companies should not and do not have to pay for customers. No definite value for this agreement has been shown and even if such a value were to be shown it is not properly capitalizable. The right of way to the water company on railroad property has been given a present value as required by law and included in the rate base.

(2) A similar agreement between Mingle and the Buffalo, Rochester & Pittsburg Railway Company.

Exactly the same discussion, conclusions, and determination apply to this agreement.

(3) The right, title, and interest of Mingle in and to all his contracts, grants, agreements, or rights of way for the distribution of water within Monroe and adjoining counties and for the construction of a waterworks system.

A list of these claimed contracts and franchises was supplied by request in Exhibit 49, but no definite original costs actual or estimated were assigned to any of them. Indeed it may be questioned whether there were any such costs except perhaps those incidental to acquirement, such as drawing and filing the necessary papers and the traveling expenses and time of the person who secured them. In any event no such costs were shown as required by the Commission's definition of original cost. All rights of way received have been valued at present value and included in the rate base.

There is still another consideration which in itself justifies the disallowance as original cost of these unallocated claimed costs of the property. These agreements, claimed rights and interests were between affiliated interests — almost identical interests. Whatever costs may have been incurred are of no binding value here, because these were not arm's length

agreements of contracts and no cost of contracts and rights of way obtained or of services rendered, other than what has been allowed, have been shown.

(4) A contract and agreement of the American Pipe Company to construct, install, and equip a system of water supply from Lake Ontario to Fairport, that company to act as engineer. In addition to the $625,000 par value of stock paid to the pipe company it was to be paid in cash from the proceeds of bonds issued for the purpose, for this construction work on the basis of (Exhibit 25): ". . . work labor and services performed and materials furnished under and in pursuance of said proposition *together with 15 per cent upon the amount of such cost in addition for profits . . . in bonds . . . to be issued at 92½ per cent of par value thereof . . . .*" (Italics supplied.)

It should be remembered also (*supra*) that Mingle was apparently connected with both the American Pipe Company and with the water company. Here again there was quite evidently no arm's length contract but affiliation of interest.

The detailed careful inventory of all the physical property of this company which is now used and useful in providing water service, has been priced at its actual or estimated original cost when constructed, and original cost determined. It of course includes all the plant constructed under this contract and the entire amount as determined from the evidence to be such original cost, is included. If there were any other specific costs they do not appear on the books of the company and have not been shown by vouchers or other proper records.

[11] The amount of $90,000 of bond discount resulting from the sale of bonds at a discount is claimed by the company as a part of the original cost of fixed capital. Cost is measured in money rather than securities. Discount is an element in the cost of raising money. The amount claimed is not allowed.

[12] All land and rights of way presently used and useful in the above unallocated costs have already been included. Actual organization costs $7,172.90 and actual (or estimated) physical property $3,337,793.33 used and useful are included in the total of allocated original cost amounting exclusive of interest to $3,344,966.23. Interest during construction will be allowed in the amount of $50,284.14 on physical property and $456.10 on organization but none on land. All other claimed costs are disallowed as not established and not in accordance with the Commission's definition of original cost.

I find the original cost of the used and useful property of the Rochester & Lake Ontario Water Service Corporation as of December 31, 1934, including interest during construction but not including land to not exceed the sum of $3,395,706, as shown in Table X.

Depreciation

The original cost of the physical property having been determined, the accrued depreciation and the annual depreciation allowance should now be found.

Eugene L. Heyser, chief valuation engineer for the company, used the

age life 4 per cent sinking-fund method for computing the accrued depreciation and an annual depreciation (Exhibit 33). His depreciation was computed on his estimated reproduction cost. He used ages as shown by the records for the property in general but for cast iron pipe he used composite average ages, weighted in accordance with the linear feet of pipe. He estimated lives or the remaining lives of the various elements of property and computed the accrued depreciation. His annual allowance for depreciation was computed in harmony therewith.

He used 100-year life for all of the cast iron pipe 6 inches in diameter and over. For 4-inch cast iron pipe he used a life of 75 years and for smaller sized pipe a life of 50 years. He likewise used a life of 100 years for the intake at Charlotte, 75 years for the main buildings and storage tanks, 35 years for the electric equipment, 60 years for the pressure filters, 75 years for the sedimentation basin, and 50 years for the steam pumping equipment.

A. H. Pratt, chief hydraulic engineer for the Commission, presented Exhibit 66 which sets forth the ages of the dollars of original cost and his estimated lives. In general he testified to shorter lives than did Mr. Heyser, although in a few cases he adopted the same or longer lives. For cast iron pipe he allowed lives varying from 90 years for the largest diameter, 20-inch and 24-inch, to 50 years for 4-inch. For the storage tanks he allowed a life of 70 years for the largest and 50 years for the smaller sized tanks. For the works at Charlotte he generally allowed a remaining life of 25 years on the theory that Lake Ontario would be abandoned as a source of supply within that time. For the boiler plant and steam pumping plant he allowed a remaining life of 15 years stating that he believed that within that period, electric prower would have become so reliable that the company would abandon its steam plant.

Due to the closing of the case, Pratt was not cross-examined on his depreciation testimony. Although the company has not offered any rebuttal testimony on matters of depreciation, its counsel indicated his intention to do so, had a settlement not been reached, and specifically reserved his rights in the matter should the settlement not be approved (S.M. 2150).

[13] The relative merits of sinking-fund and straight-line depreciation have been discussed in some detail in previous decisions of the Commission and I shall only point out the most important objections to the sinking-fund method here.

The fundamental assumption of the sinking-fund method is that depreciation accumulates not in a straight line which is a direct ratio to the age but in a curved line coincident with the sinking-fund curve. By this method, depreciation is accrued slowly at the beginning, hardly appreciable from year to year for a long-lived property, but at the end it is accumulated more rapidly. The form of the curve is determined by the rate at which the fund is compounded. Mr. Heyser used 4 per cent for the compounding rate.

In the straight-line method the amount of annual depreciation is as-

certained by dividing the cost by the total useful life as estimated after a study of the property. This figure multiplied by the age of the property as determined from the records, gives the amount of accrued depreciation to date. There are usually refinements and adjustments to be made for certain items of property for special factors but this is in all the essentials a statement of the straight-line method for determining depreciation. The facts of age and probable lives are determined by the evidence. Only the computations are mathematical. The fundamental basis of this method for determining accrued depreciation is that generally speaking the loss in value is measured by the proportionate part of the total useful life which has expired. It is founded upon the principle that on the average properties decrease in worth or value as their age increases and that the items which have shorter lives than the average are counterbalanced by those which have longer lives than the average.

It is obvious that each of these methods if correctly applied will accomplish the same result at the end of the useful life, namely, it will have accumulated at that time a fund sufficient to reimburse the company for the property which is retired. Since the sinking-fund method depends upon the accumulation of compound interest upon the fund set aside for depreciation, unanticipated retirements during the earlier years may so deplete this fund that it will be extremely difficult to offset the loss by other property in the same account lasting more than the average life. Further the sinking-fund method is difficult to apply since it requires careful and somewhat complicated accounting practice and unless those in charge thoroughly understand its operation and live up to its every requirement, including actual investment of the fund so as to yield the required return, it will not adequately protect the investment in the property and may be found deficient at the very time it is most needed.

Pratt gave it as his opinion that it is extremely probable that the steam plant of this company at Charlotte will be abandoned not later than fifteen years hence, and also that public demand will require the abandonment of Lake Ontario as a source of supply not later than twenty-five years hence. There is a possibility, too, that either might happen before the expiration of those periods. It is, therefore, highly important that the method of depreciation which is chosen be such as will give the investor a maximum protection during the entire probable life of the plant. The straight-line depreciation method will, I believe, best accomplish this result, and I have adopted it. The ages and lives which I have determined are discussed below.

The ages of the dollars as determined by Heyser were based on reproduction costs. Those determined by Pratt were for original cost. Since reproduction cost is not being considered I have necessarily adopted Pratt's dollar ages in this determination.

[14] From Heyser's testimony it appears that in general he has adopted the ultimate rather than the average life which may be expected from units of property. This has resulted in his estimates of life being too high

in most instances. In some instances I believe that the lives adopted by Pratt are too low. I agree with Pratt that the source of supply works will probably be abandoned in twenty-five years or not later than 1959, and the steam pumping equipment in fifteen years or by 1949. If an upland gravity source of supply be substituted for the present supply pumped from Lake Ontario, the necessity for booster stations would largely disappear. I have increased the life which Pratt has placed on most of the stations but not beyond this 25-year remaining life.

For chemical equipment which corrodes rapidly and soon becomes obsolete, Pratt is the more convincing witness, and I have accepted his life of fifteen years. On transmission and distribution mains, I have adopted Pratt's life of ninety years for the sizes of 16 inches and over in diameter, but I have increased by five years the life estimated by him for the tar dipped pipe from 6 to 12 inches in diameter. For cast iron pipe, sizes 4 inches in diameter and smaller, and for wrought iron pipe, the testimony shows that the lives estimated by Pratt agree more closely with the company's records of retirement than Heyser's, and for that reason I have adopted Pratt's lives. For meters and services, I have accepted the lives agreed upon by these witnesses and I have given equal weight to Heyser and Pratt on the lives for meter installation and general equipment. It would appear that Heyser has given little consideration to the casualties not covered by insurance which may occur in hydrant accounts, and I have, therefore, given more weight to Pratt in determining the life of hydrants.

Using the ages and lives so ob-

TABLE X

ORIGINAL COST AS OF DECEMBER 31, 1934

ACCRUED DEPRECIATION AND ANNUAL DEPRECIATION ALLOWANCE

		Original Cost including Interest during Construction	Annual Depreciation Allowance		Accrued Depreciation	
			Per Cent	Amount	Per Cent	Amount
312	Structures	$376,406	2.00	$7,528.12	31.89	$120,036
313	Boiler Plant Equipment	62,470	4.55	2,842.38	32.18	20,103
315	Electric Pumping Equipment	150,771	2.62	3,950.20	34.33	51,760
316	Steam Pumping Equipment	69,925	2.29	1,601.28	65.72	45,955
320	Purification System	258,596	2.65	6,852.79	33.92	87,716
321	Transmission Mains & Acc.	1,508,273	1.13	17,043.48	15.08	227,448
322	Distribution Mains & Acc.	601,051	1.49	8,955.66	27.42	164,808
323	Services	26,535	1.75	464.36	44.00	11,675
324	Consumers' Meters	173,224	2.86	4,954.20	20.00	34,645
325	Consumers' Meter Installation	37,610	1.82	684.50	18.00	6,770
326	Hydrants	91,821	1.67	1,533.41	20.00	18,364
328	General Equipment	31,395	7.14	2,243.00	37.31	11,712
	Total	$3,388,077	1.73	$58,653.38	23.63	$800,992
	Organization	7,629				
		$3,395,706				
	Depreciation	800,992				
	Original cost less depreciation including organization	$2,594,714				

tained, I have determined the accrued depreciation and the annual depreciation allowance for each class of property. Interest during construction was depreciated in harmony with the account to which it applied. Table X shows the summary of these classes of property by accounts and the accrued and consistent annual depreciation found for each account.

Working Capital

E. L. Heyser, chief valuation engineer, and C. T. Chenery, chairman of the board of directors, for the company, and William R. Wolff, associate valuation engineer for the Commission, testified as to the working capital required by this company.

Mr. Heyser made an allowance for working capital of $145,000, which he determined by including the average cash bank balance, accounts receivable from consumers, unbilled revenue, and materials and supplies (S.M. 768 and 769). He gave no consideration to bills payable.

[15] Mr. Chenery testified that working capital was not susceptible of exact measurement, but based on the experience of the company, he believes that $146,000 is required (S.M. 1001). He stated that it was necessary for the company to extend a reasonable amount of credit to its consumers and this required some $16,000. He also felt that the company should maintain some cash balance in order to meet unexpected situations and further that it was necessary to build up a reserve during the year to meet bond interest, taxes, and dividends, if any be paid. Consumers should not be required to furnish funds to pay bond interest and dividends and also to pay it in the return. Practically all taxes are paid after revenues are collected and not before.

Mr. Wolff submitted Exhibit 34 and testified that in his opinion the working capital allowance to be made should be the working cash needed, plus materials and supplies. He further testified that after a careful examination of the books and the billing methods of this company, he was convinced that no allowance was necessary for working cash as it had been provided by the consumers in advance of the need for it. He found that the average inventory of materials and supplies was between $20,000 and $22,000 and he believed this to be reasonable. He made no deductions for materials included which would be used for construction which would be covered by interest during construction.

An examination of this company's billing practice reveals that the company bills its domestic consumers quarterly, staggering the billing so one-third pay each month. Large commercial and industrial consumers are billed monthly. The quarterly accounts are allowed a discount if paid within ten days. Wolff's study shows that beginning with the first day of a given year, disbursements exceed collections up to and including the first week of the third month. From that time through the remainder of the year the cumulative collections exceed the disbursements. The greatest cumulative deficit during the period studied was $15,055. Mr. Wolff computed the amount of interest which the company would pay on borrowed funds during the period of deficiency. In computing the deficiency

between receipts and disbursements he excludes bond interest and the annual amount credited to the depreciation reserve which is only a bookkeeping entry. He finds the interest on the funds necessary to offset the deficit to be $85.75 which capitalized at 6 per cent amounts to about $1,400. This he believes is the maximum working cash that should be capitalized. To this would be added some $21,000 for materials and supplies.

[16] From an examination of the testimony, it appears that Mr. Wolff has made a more careful analysis of the actual and proper cash requirements. However, there is some merit in the company's contention that some cash balance must be maintained in the bank in order to keep its credit good. This would necessitate borrowing slightly larger sums than found by Wolff during the first few months. Bearing this in mind, I believe that $25,000 is a fair working capital allowance.

Going Value

The company claimed and presented witnesses whose testimony purported to show a "going value" of this company of $484,000. In view of the settlement herein proposed no consideration has been given to this intangible and nebulous, so-called element of value.

Reproduction Cost

By the terms of settlement in this case, no consideration is to be given to reproduction cost. However, it is desirable to indicate briefly what the testimony of the witnesses on this subject purports to show, in order to afford a basis for judgment as to what the probable effect would have been had that element been considered.

Estimates of the cost of reproducing this property new as of December 31, 1934, were submitted by E. L. Heyser, chief valuation engineer for the company (Exhibit 28) and A. H. Pratt, chief hydraulic engineer for the Commission (Exhibits 57 and 57a).

The findings of these two witnesses for reproduction of depreciable property were:

Heyser for the company	$4,053,249
Pratt for the Commission	3,666,283

A stipulation was made between representatives of the company and the Commission on November 4, 1936 (Exhibit 65) with respect to the amount of rock in pipe trenches. This would reduce Heyser's reproduction cost slightly. Due to the closing of the case the amount of this reduction was not determined.

From these figures it is apparent that any weight given to reproduction cost would have resulted in earning requirements in excess of those computed on original cost and so in a smaller reduction in rates as far as this factor is concerned.

Consumers' Contributions

[17] The amount of consumers' contributions reported by the company in its 1935 annual report to the Commission (Exhibit 40) was $51,780.51. This amount represents sums contributed by consumers toward the expense of constructing property which is included in the company's operating property accounts. As it does not appear just or reasonable to require

consumers to contribute money for the construction of property to be owned by the company and then to permit the company to earn a return on the property so constructed, I have for the purpose of measuring the company's offer of settlement against what might possibly be ordered, deducted these contributions from fixed capital.

If the amount of $51,780.51 were not to be deducted from fixed capital the effect would be to permit the company to earn an additional amount of $3,106.83. If this be added to the return computed on original cost, it will be seen that the result would not affect the conclusion herein.

Return

For the purpose of considering a return based on original cost less depreciation as of December 31, 1935, the various items included are as follows:

TABLE XI

Original cost of depreciable property as of December 31, 1934		$3,388,077
Net additions—1935 (Exhibit 70)		61,221
Original cost, December 31, 1935		$3,449,298
Accrued depreciation—December 31, 1934 (Table X)	$800,992	
Depreciation for year 1935 (Table X)	58,653	
Total	$859,645	
Retirements—1935 (Exhibit 70)	10,878	848,767
Original cost less depreciation, December 31, 1935		$2,600,531
Less contributions		51,780
		$2,548,751
Add:		
Land		45,845
Rights-of-way easements		43,483
Organization		7,629
Working capital		25,000
		$2,670,708

[18] The testimony of the company in this proceeding purports to show that a rate of return of 7 per cent is necessary. The absurdity of this claim, under present conditions, is so obvious to everyone that it scarcely requires discussion. No doubt even 5 per cent, with present costs of money, would seem high to consumers. It would seem that even 5½ per cent might be justified.

Annual depreciation allowance.

[19] There should be allowed for annual depreciation an amount in harmony with the accrued depreciation. This is shown on Table X and amounts to $58,653.

Revenue and Expense

Revenues.

The company submitted Exhibit 21, which was later corrected on account of an error to change the gross revenue for hydrants owned by the city from $20 to $40 and with corresponding changes in operating expenses, all as per a contract with the city of Rochester (not under the jurisdiction of the Commission). This final correction is contained in Exhibit 21A which was received in substitution for Exhibit 21. The following is taken from Exhibit 21A:

TABLE XII

REVENUE AND EXPENSES
(From Exhibit 21A)

	1932	1933	1934	1935	Average
Total revenue	$517,368	$528,819	$515,644	$505,110	$517,735
Add 3 months East Rochester to make full year				4,000	
				$509,110	
Deduct					
Commissions under agency agreements	5,620	6,093	6,059	4,125	5,474
Miscellaneous	4,063	3,455	2,989	3,288	3,449
East Rochester (estimated loss)					15,150
Total deductions					$24,073
Revenues used herein					$493,662

The operating revenues for the years 1932, 1933, 1934, and 1935 average $517,735. From this should be subtracted the average agency commission amounting to $5,474 (fees received for rendering certain interior service to water districts), and the average miscellaneous revenues including tapping fees, etc., $3,449, tapping fees having been eliminated by virtue of the new rates filed under the proposed settlement. Service to the village of East Rochester ceased on September 9, 1935. The revenue from this customer amounted to $13,058 for the nine months of that year, which is equivalent to about $17,000 per year. From this $1,850 should be deducted for the expense incident to pumping and purification which gives a net revenue from East Rochester of $15,150 per year. This should be deducted from the average revenue. For the purpose of this report the revenue will be estimated at $493,662.

Operating expenses.

The operating expenses taken from Exhibit 21A are as follows:

TABLE XIII

OPERATING EXPENSES
(Exhibit 21A)

	1932	1933	1934	1935	Average
Source of supply	$9,150	$1,053	$37	$39	
Steam pumping	501	494	1,055	746	
Electric pumping	66,205	69,844	69,406	61,265	
Purification	10,951	12,132	13,455	13,674	
Transmission and distribution	39,703	36,135	44,555	40,379	
Commercial	26,270	22,425	29,208	31,979	
General and miscellaneous	62,457	60,903	67,982	90,817	
Total (not including taxes)	$215,237	$202,986	$225,698	$238,899	$220,705
Deduct					
Rate case expense			2,435	26,650	
Operating expenses 1932	9,129				
Reserve for retirement	25,000	25,000	25,000	25,000	
Total deductions	$34,129	$25,000	$27,435	$51,650	
Adjusted totals	$181,108	$177,986	$198,263	$187,249	$186,267
Add 3 months to East Rochester to make full year				463	
				$187,712	

[20] The Source of Supply expense needs some explanation. The charges under this account for 1934 and 1935 are for Water Purchased for Resale. In 1933 the expenditure for that purpose was $506 and in 1932, $21. The remainder of the $1,052 charged in 1933 was for operating labor, for which there is no charge in either 1932, 1934, or 1935. The remainder of the $9,150 charge in 1932 consisted of $9,129 charged to Operating Supplies and Expenses. While there is nothing in the record to indicate the purpose of this entry, it is understood that it was a charge for studies in connection with a possible Honeoye supply and that $4,820 of it represented expenditures prior to 1932. This charge I have eliminated from the operating expenses as being nonrecurring. Also I have eliminated from the years 1934 and 1935, the amounts charged to rate case expense. This item will be considered under that caption. An examination of the General and Miscellaneous Operating Account shows that when adjusted by deducting rate case expense the annual charges for the four years are quite uniform.

Making the above deductions, the total average operating expenses for the four years, which for the purpose of this report will be allowed, amounts to $186,267.

During this 4-year period, there has been some change in the company's practice in respect to administration. Previous to 1934, a management and advisory fee was charged; but during 1933 this was eliminated, but approximately corresponding expenses were charged directly as administrative and other salaries and fees to consultants. The sum total of these various charges varied from $13,969 in 1933 to $20,562 in 1935, as shown below:

TABLE XIV

EXAMINATION OF ADMINISTRATIVE EXPENSES AND MANAGEMENT FEES

	1932	1933	1934	1935
Administrative salaries	$5,681	$7,100	$9,073	$9,065
Management and advisory fees	6,666	1,232		
Consultants		1,047	1,568	1,580
Plant manager salary—operation	4,590	4,590	6,746	9,918
Total	$16,937	$13,969	$17,387	$20,563

These include the services of the resident general manager who gives his full time to this property, and part time service and office expense of a district vice president who has administrative functions over several affiliated plants within the state, and the general supervisory officials and related expenses of this and affiliated and associated companies located in the New York office. These latter were formerly connected with the company which rendered the management and advisory services, but recently substantially the same personnel have been directly compensated by this company in approximately the same amount.

While there may be some question as to the desirability of centralized coöperative management of this property, and there may be still more question as to the need of a district office in between the local administration and the central jurisdiction in New

York city; still considering the matter from a broad viewpoint, and having in mind the nature of the settlement, no deduction from operating expenses on account of management is made herein.

Rate case expense.

[21] The total rate case expense claimed by the company (Exhibit 71A) is $48,415.67. This includes salaries and traveling expenses but it was testified that it did "not include any salaries of general officers or counsel and staff" already charged to operation. It also includes an item of $1,630, yet to be billed by the Public Service Commission but estimated as direct expenses by the company.

Of the $29,081 charged to Regulatory Commission Expense in 1935, $26,650 represented the portion applicable to this rate case. In 1934 there was also $2,435 charged to the same account. These items have been respectively deducted from the operating expenses and should be charged to Account 146. Regulatory Commission Expense, in accordance with amendment No. 4 ordered June 26, 1934, to the Uniform System of Accounts.

The expenses of this rate case should be amortized over a period of six years beginning with the year 1934, amounting to $8,069 annually.

Uncollectible bills.

The allowance in the company's accounts for uncollectible bills has varied in the 4-year period from $1,200 to $2,400 per year, but in the year 1936 the allowance has been reduced to $550. For the purpose of this memorandum, I will allow $600.

Taxes.

The company submitted Exhibit 73, giving a comparative statement of taxes, excluding Federal income taxes, which shows that they have been generally increasing from $46,034 in 1932 to $53,290 in 1935. For 1936, taxes actually billed plus those estimated by the company were $63,224. The company estimates 1937 taxes will be $67,100. For the purpose of this report, I will allow taxes at $64,000 excluding Federal capital stock tax. As shown by the above figures no Federal income tax or Federal stock tax has been included.

TABLE XV

SUMMARY

Revenues as adjusted		$493,662
Expenses as adjusted	$186,267	
Uncollectible bills	600	
Taxes	64,000	
Annual depreciation	58,653	
Rate case expense	8,069	317,589
		$176,073
Required return at 6%		160,242
Reduction indicated		$15,831
Required return at 5½%		$146,889
Reduction indicated		$29,184

Rate Structure

This company renders service under nine service classifications contained in its filed schedules and has over twenty contracts with municipalities which the law does not require to be filed. The Commission has been advised that they are all alike excepting the contract with the city of Rochester. The company uses some mains and hydrants belonging to the city and also has an agreement to buy water from the city as well as sell to it. For this reason, the rate paid by the city of Rochester is less than that paid by other municipalities.

Service Classification No. 1—Domestic Use.

The rates set forth in this classification are the only filed rates which were changed under the proposal for settlement. A comparison of the net rates under the old filing and the new filing made in accordance with the company's proposal was made effective for service rendered after January 1, 1937, and is shown below:

	Old Rate	New Rate
Net minimum charge per quarter	$2.50	$2.25
Water allowance per quarter	10,000 gal.	10,000 gal.
All over 10,000 gallons per quarter ..... net rate per 1,000	.25	.25

The discount for prompt payment remains the same as before.

This reduction effects a saving of $1 per year for each domestic consumer.

The rates prescribed by Service Classifications Nos. 2 to 9 were not changed but the provisions contained therein are indicated briefly below: [Schedules omitted.]

The company submitted Exhibit 62 which was a study of the cost of rendering service to the various classes of consumers. This study indicates that a reduction should be made in the wholesale price to municipal water districts. This the company has agreed to do and while the contracts with these districts are not filed with the Commission, it is understood that the new and old rates are as follows:

	Per year	Old Rate Per 1,000 gal.	New Rate Per 1,000 gal.
First	10,000,000 gal.	20¢	20¢
Next	40,000,000 gal.	18½¢	18¢
All over	50,000,000 gal.	16½¢	15¢

It is further understood that the above reduction will save the water districts about $10,000 per year.

Complaints Received

Since the announcement of the company's offer of settlement in this proceeding at Rochester in December, several complaints have been received from consumers on various phases of the rates. These complaints and my conclusions in respect to them are presented herewith.

Domestic rates.

This is a protest by Frederick Dorschell, as "Chairman of the Lower 10th Ward Tax Payers' League," against the acceptance by the Commission of the compromise offer of the water company in settlement of the pending rate case, on the ground that "the offer made is insufficient and inadequate reduction of water rates as now charged."

[22] As this city ward is apparently partly served by the city of Rochester and partly by the water company, this complaint is no doubt inspired by the water users' desire to have the rates charged by the water company the same as those charged by the city. While the reduction proposed lessens the difference between the two rates, the new company rate will still be higher, especially the minimum bill, than the city rate. This is partly offset, however, by the fact that the company furnishes and maintains the meters, while the city requires its customers to purchase meters at a cost of $15 each and to maintain them, a fact generally not recognized by domestic consumers in comparing rates, but which should in fairness be given consideration.

[23] To these complainants it should be further pointed out that under the law the rates of private water companies must be determined on the basis of the reasonable cost of service including a fair return on the fair value of the property used and useful in rendering water service. This we have determined in this proceeding on the basis of original cost less depreciation, which is undoubtedly less than present value. Our findings do not justify any further reduction in domestic water rates at this time. The complaint is therefore not well founded and should be dismissed.

Apartment house rates.

Two complaints have been received from representatives of large apartment houses. There are fifteen customers receiving service under Service Classification No. 3 and 3-a, which includes large apartment house users. The burden of one of these complaints, which is in the form of a copy of a letter addressed to Rochester City Manager Baker, is that apartment houses are strictly residential and water used for domestic purposes only, and that they should not be "penalized with a higher rate," and that these customers are not included in the "10 per cent reduction of rates." This complainant threatens the city with legal action "should the approval of the rate reduction be granted for Classification No. 1 users only." The other complainant, frankly admitting commercial use of water for "running the steam boilers and three frigidaire compressors" asks for a reduction to a "flat 20 cents per 100 gallons for all water used." This request is based on a claimed lower cost of service to large apartment house users.

The first complainant is obviously under a misapprehension as no 10 per cent reduction of rates is proposed. As later pointed out our investigation shows that the only class of customers now paying more than the cost of service is municipal wholesale water districts,—with the possible exception of domestic users.

Accordingly, about half the reduction was properly set aside for this class of water users. It seemed desirable to allocate the remaining amount available for rate reduction in such a way that no individual consumer would be increased and that as many consumers as possible would share in the reduction. To make a reduction in rates to fulfil these conditions could only be accomplished by making a flat reduction to each consumer. Accordingly, Service Classification No. 1, applicable to use of service for metered domestic consumers, was reduced with respect to the net minimum charge of $2.50 per quarter to $2.25 per quarter, or $1 a year. This applies to all consumers in this classification which includes a very large percentage of the total consumers.

The second point in these complaints is that apartment house users are being "penalized by a higher rate," and are not sharing the reduction. That this class of users is not paying a higher rate is shown by the facts, taken from the annual report of the company to the Commission, that the average rate paid by the 14,000 domestic customers in 1935 was 26.88 cents per thousand gallons,

while the average rate paid by the fifteen apartment house users was 21.3 cents per thousand gallons. The average rate paid by the first complainant in 1935 was 20.5 cents per thousand gallons for 2,043,000 gallons of water, and of the second complainant 21 cents per thousand gallons for 1,857,000 gallons. Even after the present reduction to domestic users, apartment house rates on the average will still be 16 per cent below those paid by the former. Obviously, quantity use and lower cost of service are already recognized in the rates and our investigations show that no further reductions are justified at the present time.

Municipal water districts.

This complaint is by the town board of Greece, one behalf of four water districts (Ridge road, Latta road, Eddy-Stone road, and Lake shore), in that town. These four districts used 78,913,800 gallons of water in the year ending November 30, 1936, for which they paid an average rate of 17.1 cents per thousand gallons. The complaint is that the probable saving to these districts under the new rates will be only about $1,600, that this is not enough, and that the new rate is still higher than that paid by large industrial customers.

[24] According to the 1935 report of the company to the Commission, the total sales to eighty industries in Rochester and vicinity for the twelve months was 709 million gallons amounting to $110,759, which would equal an average price of 15.62 cents per thousand gallons. The average price paid for water for the year 1935 by the twenty-one water districts (excluding the two Rochester city contracts, *supra*) under the old rate was 18.78 cents per thousand gallons. The estimated reduction to all of the water districts is approximately $10,000 which, if divided by the 519,416,000 gallons consumed by these districts would make 1.93 cents reduction. Subtracting this from the 18.78 cents would give a new average rate for water to all water districts of 16.85 cents per thousand gallons, which is a little more than one cent above the average rate to the large industries. But in comparing water district rates for wholesale water with similar industrial rates, consideration should be given to the fact that the former includes fire protection, much of the cost of which is in the wholesale price for water, whereas all fire protection for the industries is paid for through taxes in addition to the rate for industrial use of water, by virtue of the fire hydrant charge paid by the municipalities. For this reason the differential does not appear to be unreasonable.

Apparently, the water districts in the town of Greece pay more than the average rate paid by other water districts because of lower consumptions which keeps the use in the higher rate blocks (see consumptions in Table II, p. 10). In fact, for the year 1935 the average cost of water in these four districts was 19.5 cents, as compared with 18.78 cents per thousand gallons in all 21 water districts.

The evidence in the case in regard to the allocation of the various rates with respect to the various classes of service indicated that each class was bearing its fair share of the cost of

service, except the municipal wholesaler group, which was bearing more than its share (Exhibit 62). In respect to the latter, it was shown that a reduction was justified and this is the reduction of $10,000 proposed to be made by the company. The total reductions are all that are justified on the record in the case. Any further reductions to any one group would legally justify an increase in some other. Further reductions do not appear to be required or expedient.

This company has filed no rate for wholesale municipal use with the Commission. The water company contends that such contracts are without our jurisdiction, and that therefore rates are a matter of negotiation between the company and each municipality. We have not attempted to find a rate herein for municipal wholesale water districts although in considering other rates and rate reductions we have allocated $10,000 reduction to them as fair and reasonable.

Conclusions and Recommendations

In the determinations herein made, I have measured the amount on which the company is entitled to earn, by the present value of land and the original cost of the physical property (estimated in small part), which can be definitely allocated to fixed capital accounts, less accrued depreciation on the depreciable property as found, both as of December 31, 1935. Probable earnings for future years are measured by average revenues and expenses for the four years 1932 to 1935 inclusive, adjusted for nonrecurring items. The data presently available are not sufficient to permit making this determination as of December 31, 1936. So far as known, these data indicate that original cost less depreciation was less by some $40,000, and that expenses were enough higher to offset the increase in revenue due to improved business conditions.

On the basis of these determinations and using a 6 per cent return, a reduction in rates of about $16,000 would be required. Using a 5½ per cent return, a reduction of about $29,000 is indicated. If consumers' contributions were not deducted but the company allowed to earn on these amounts, the reductions required would be respectively about $13,000 and $26,000.

The estimates of reproduction cost of this property by both witnesses for the company and the Commission are considerably greater than original cost as found. If these were to be given weight and a rate base determined as would be required if an order were to be issued, it would in all probability be greater than the base used herein. Accrued and annual depreciation, if computed on such a base, would also be greater. No consideration has been given to going value. It may fairly be concluded that reductions which could legally be ordered at the formal conclusion of the case would be less than those arrived at by the method used herein.

In order to effect a settlement of the case without litigation, in the interest of its consumer relations and to effect an immediate reduction to domestic users, near the conclusion of the case the company made an offer of settlement conditioned on the clos-

ing of the proceeding. After preliminary summing up of the evidence, I agreed to recommend this if satisfactory to the city of Rochester and the towns affected. The company has filed with the Commission rates which were made effective January 1, 1937, and which effect a reduction of one dollar annually to all its domestic consumers or about $14,000. In addition, it proposes reductions in wholesale rates to municipal water districts of about $10,000 additional.

Since the announcement of the proposed settlement, certain complaints have been received. These are analyzed herein and found not to have merit. I am not advised of any action by the city of Rochester. Other than the communication from the town of Greece (*supra*), no resolutions or expressions regarding the settlement have been received from other towns or districts affected.

In view of all of the above facts and circumstances, I recommend that this investigation be discontinued and the proceeding closed.

Chairman Maltbie and Commissioner Van Namee concur; Commissioners Lunn and Brewster not present.

MICHIGAN PUBLIC UTILITIES COMMISSION

Re Menominee & Marinette Light & Traction Company

[D-3050.]

Rates, § 358 — Electric — Rural minimum bill.

1. A minimum bill of $4 a month for rural domestic service was approved where rural customers were widely separated and would probably average in the neighborhood of three or less customers per mile, and where under its rural extension plan the company proposed to spend up to $400 per customer in making rural extensions without contributions on the part of its customers, p. 63.

Rates, § 355 — Electric — Rural domestic and commercial.

2. Service of both domestic and commercial customers under the same rate in rural territory is not consistent with the general policy recognized by the Commission in rate matters, p. 63.

Service, § 190 — Extensions — Rural electric.

3. A rural extension plan of an electric utility, approved for a company having few available customers per mile, provided for extensions at company expense up to $400 per customer, with customer contributions for additional costs, the customer to receive energy at the standard rate with a monthly minimum charge of $4, and it further provided that when addi-

tional customers should be added to an extension within five years following completion of the line, adjustments and refunds would be made for the original customers in case the additional customers should decrease the average cost per customer, p. 63.

[January 13, 1937.]

PETITION *for approval of revised electric power, rural, display lighting, and temporary service rates, and of rural extension rules; revised rates and extension rules approved.*

By the COMMISSION: On December 18, 1936, the Menominee & Marinette Light and Traction Company filed with this Commission a petition requesting approval of a revised general power rate, a short term service rate, a standard farm service rate, a rural commercial service rate, the cancellation of a display lighting rate which is no longer used and the approval of revised rural extension rules.

It is represented that the proposed general power rate for application in the communities of Bagley, Ingalls, Talbot, and Wallace is, in general, lower than the present rate available in those communities and while the lowest rate on the existing rate is 3 cents per kilowatt hour, the proposed rate has a bottom step of 2.5 cents per kilowatt hour. There are, however, small increases for monthly consumptions of between 210 and 297 kilowatt hours and between 475 and 900 kilowatt hours, the maximum possible increase amounting to approximately 40 cents per bill.

There are but two customers now taking service under this rate and one of these customers will receive a 5 per cent reduction and the other a 10 per cent reduction. The total reduction for these two customers is estimated to amount to approximately $163 per year.

The existing short-term service rate is not available for commercial customers desiring service of that type. The proposed short-term service rate now includes commercial service.

The existing display lighting rate applicable in Ingalls, Wallace, and Talbot, now filed as First Revised Sheet No. 9, is represented as being without customers and with no demand for this type of rate schedule. Cancellation is therefore requested.

At the present time all rural customers, whether commercial or farm, are receiving service under the rural rate filed as Second Revised Sheet No. 21, M. P. U. C. No. 2. It is now proposed to institute a rate for standard farm service and a separate one for standard commercial rural service.

The proposed standard farm service rate has a minimum monthly charge of $4 for which the customer will receive 50 kilowatt hours while the present rural rate has a minimum monthly charge of $2 for which the customer receives but 10 kilowatt hours. Aside from this minimum bill, the proposed farm service rate is lower in all respects than the existing rural rate and any farm customer using 37 or more kilowatt hours per month will have a reduced bill under the new rate. The annual reduction to this class of

customers is estimated by the company to be approximately $231.

In order to avoid the possibility of increasing the costs for electric energy to any of its rural domestic customers by this change, the company proposes to permit the present rural customers to continue taking service under the present rate unless the customer will be benefited by a transfer to the new rate, in which case such a transfer will be made.

[1] The Commission has been hesitant to approve a domestic rate having as high a minimum bill as $4 per month in spite of the showing made by the Federal Rural Electrification Administration that upwards of this amount is necessary in order that a customer shall not be a burden on other consumers. However, it is recognized that the rural customers of this company are rather widely separated and will probably average in the neighborhood of three or less customers per mile. In the rural plan later discussed in this order, the company also proposes to spend up to $400 per customer in making rural extensions without contribution on the part of its customers. Under these conditions, the Commission believes that the $4 minimum monthly charge is reasonable and will work to the advantage of both the company and its customers in extending rural electric service.

[2] The proposed commercial rural rate has a minimum monthly charge of $4.50 for which the customer will receive 50 kilowatt hours. The steps in the rate have also been changed and the lowest rate is now 2.5 cents per kilowatt hour while the lowest step in the old rate was 3 cents per kilowatt hour. The effect of the proposed rate will be to decrease the bills of customers using between approximately 44 and 100 kilowatt hours per month and those using more than approximately 3,500 kilowatt hours per month. Other customers would have increased bills under the proposed rate and it is frankly the contention of the company that this is a step in the direction of establishing approximately the same differential between rural domestic and commercial rates as there is between the domestic and commercial rates in incorporated cities. The present policy of serving both the domestic and commercial customers under the same rate has gradually come about as the rural territory has developed and is not consistent with the general policy of this company, nor with the general policy which has been recognized by the Commission in rate matters of other companies.

In view of the fact that the company proposes to permit customers now taking commercial rural service under the existing rural rate to remain on that rate, if it is to their advantage, the effect of the proposed change would be to decrease the electric bills of rural commercial customers approximately $109 without increasing any bills for such customers.

[3] The proposed rural extension policy is considerably more liberal than the one now in effect. Under the present policy a customer is required to pay revenue in the course of the first three years equal in amount to the cost of extending service to him. If, for example, the cost of extending service to a customer were $400, that customer would be required to make

monthly payments of $11.11, for a period of three years. Under the proposed plan this same customer would be required to make monthly payments of $4 over a 3-year period. In both cases he receives energy at the standard rate for the amounts paid.

If the cost of extending service to a customer is greater than $400, under the proposed plan the customer will be required to contribute as a cash payment to the company such additional cost in excess of $400 and in addition the minimum monthly charge of the rate under which service is billed shall be increased .9 of 1 per cent of the first $200 cost in excess of $400 per customer, and 1½ per cent of the excess over $600 cost per customer. This is a new provision which the company believes to be necessary in order to cover the cost of operation, maintenance, and taxes on the additional equipment represented by the cost contributed by the customer.

The customer receives energy at the standard rate for this increased monthly charge, and the Commission believes that this increase in the monthly minimum is justified when the equipment devoted to the service of an individual customer becomes so great.

A further provision in the proposed extension policy provides that when additional customers are added to an extension within five years following the completion of the line, adjustments and refunds will be made for the original customers in case the additional customers decrease the average cost per customer.

After careful consideration and comparison with rural extension policies previously approved, the Commission is of the opinion that under the conditions existing in the rural territory served by the Menominee & Marinette Light and Traction Company where there are so few available customers per mile that the proposed rural extension policy is reasonable and will materially benefit the farmers in its territory through making it possible for them to secure electric service at considerably less cost than heretofore.

The petitioner further shows that the Public Service Commission of Wisconsin has under date of July 30, 1936, approved and ordered the above mentioned rates and rural extension rules for use in the Wisconsin territory served by the petitioner and it desires to now make these rates and rules uniform through the entire territory served by it.

Industrial Progress

Potomac Edison Plans $3,000,000 Expenditure

THE Potomac Edison Company plans a $3,000,000 addition to its electric power plant at Cumberland, Md., according to George S. Humphrey, vice president.

Mr. Humphrey states that the addition will consist of a single-boiler, single-turbine plant rated at 30,000 kw., with turbine taking steam at 800 lb. gage pressure and 825 deg. F. and exhausting to a surface condenser.

The turbo-generator is being secured from the General Electric Company and the boiler from the Combustion Engineering Company. It is expected that the new plant will be ready for service by July, 1938.

Tagliabue Mfg. Co. Issues New Catalogue

THE C. J. Tagliabue Mfg. Company, Brooklyn, N. Y., has issued a 32-page catalogue (No. 900C), 8½ by 11 inches, which describes and illustrates the latest models of Tag Non-Indicating Controllers for temperature, pressure, and time.

In addition to the instrument listings, the book contains a comprehensive discussion of various types of Tag Controllers, their applications and how they work.

Copies of this catalogue may be secured from the manufacturer.

Aluminum Company to Have Second Largest Rolling Mill

THE Edgewater, New Jersey, plant of the Aluminum Company of America will be made the second largest aluminum rolling mill in the United States, as a result of proposed expansions, according to Edward H. Grotefend, manager. Mr. Grotefend states that $3,000,000 of the $26,000,000 expansion program, recently announced, would be used in Edgewater, partly for replacement of old equipment, but largely for construction of a new rolling mill with special advantages.

Harnischfeger Issues Bulletin on P & H Smootharc Welders

A SMOOTHARC Welder bulletin entitled "The Arc-Welding of Tomorrow," has been released by the Harnischfeger Corporation of Milwaukee. As modern in presentation as the subject it deals with, this book, (No. W10), puts "in black and white" the advantages gained by the internally stabilized arc. It tells just what single current control means to the operator—what improvement it makes on the finished welded product. Clear action photos illustrate all the uses of many of the many Smootharc models—from the vertical 75 and 100 ampere types to the 200, 300, 400 and 600 ampere horizontal models. Stationary and portable-trailer Smootharcs are also shown. It explains the importance of the arc characteristic to modern welding practice. A cutaway view is used to tell the story of Smootharc design. This bulletin may be obtained by writing the Harnischfeger Corporation, 4200 West National Avenue, Milwaukee, Wisconsin.

Gas Indicator Described

THE Mine Safety Appliances Company, Braddock, Pittsburgh, Pa, announce the publication of a new bulletin describing the MSA Combustible Gas Indicator, a self-contained, portable instrument used for testing explosive gas hazards and locating leaking gas.

The new brochure is complete with photographic illustrations and operating diagram together with examples of how and where the instrument is being used so effectively. Copies of this informative brochure may be obtained by addressing the manufacturer.

Jas. E. Watson New President of Elliott Company

MR. Jas. E. Watson, who has been with the Elliott Company for twenty-six years, and an active executive for twenty-five years, has been elected president of the company. He succeeds G. F. Elliott, who has been president of the Elliott company since the death of his father, W. S. Elliott, founder of the company, who died February 21, 1935. Mr. G. F. Elliott, because of the time and attention required by his duties as executor and trustee of his father's estate, has tendered his resignation as president of the Elliott Company. He will serve as chairman of the board of directors, and of a newly created executive committee.

Mr. Watson joined the Elliott Company immediately after his graduation from Penn State College in 1911. He was sent to the St. Louis district sales office, from which he was recalled in July, 1912, to become assistant sales manager. He rapidly became successively sales manager, general sales manager, a director, general manager, vice president and since 1920, he has been executive vice president of the company.

During these years the Elliott Company had been growing rapidly from very small beginnings. Several companies and plants had been acquired by the Elliott organization. These included, in 1916, The Lagonda Mfg. Co., of Springfield, Ohio, in 1924, The Kerr Turbine Co., of Wellsville, N. Y., and in 1926, The

Ridgway Dynamo and Engine Co., of Ridgway, Pa. Plants at Springfield, Ohio, and Ridgway, Pa., are still operated in addition to the main works of the company at Jeannette, Pa.

The list of products of the company has been expanded from the small tube cleaners, strainers, and steam specialties originally manufactured, to include most of the major equipment of a power plant, and in addition several lines of special equipment used in the process industries.

In addition to having played a major part in the successful record of the Elliott Company, Mr. Watson also enjoys a very wide acquaintance in the power plant and general business field. He has been an active member and executive in several trade associations.

$2,000,000 Expansion Program

TEXAS Power & Light Company will spend more than $2,000,000 this year on expansion and improvements, according to John W. Carpenter, president. The company proposes to construct about 2,000 miles of rural power lines this year, about the same as last year.

General Motors Plan Large Expansion Program

GENERAL Motors Corporation will spend $40,000,000 for an expansion program for 1938, according to William Knudsen, president. The corporation spent $55,000,000 on expansion for the current year.

The expansion will be directed toward increasing the production of subsidiaries, to improvements in the corporation's factories and to facilitate manufacture of new models. Mr. Knudsen stated that part of the expansion will be centered in the plants of the Chevrolet Motor Car Company and will thus increase the production of this unit.

Consolidated Edison Affiliates to Spend $4,000,000

WESTCHESTER Lighting Company and the Yonkers Electric Light & Power Company, affiliates of Consolidated Edison Company, estimate that they will spend approximately $4,000,000 this year for extensions and improvements of gas and electric distribution systems to meet the demands of increased service.

While no large individual building projects are planned, it is estimated that $4,000,000 will be needed for additional transformers, service extensions, transportation equipment and general improvements.

Issues Transformer Bulletin

PENNSYLVANIA Transformer Company, Pittsburgh, Pa., has published a bulletin (No. 340), 8½ by 11 inches, dealing with power and distribution transformers and containing photographs of various large Pennsylvania transformers, single phase and three phase, used for power transmission, for electric arc furnaces, for railway systems, and for other industrial uses.

This bulletin, which gives evidence of the wide range of Pennsylvania's service, describes, briefly, a few of the important developments and improvements in Pennsylvania transformers, such as its uni-row radiators, straight line tap-changers, circular coils, etc., and one section is devoted to improvements in distribution transformers. Copies may be obtained from the manufacturer.

Sangamo Moves Chicago Office

SANGAMO Electric Company, Springfield, Illinois, announce the change of address of their Chicago office, effective May 1st, to Suite 1022, 140 South Dearborn Street, Chicago, Illinois.

Owens-Illinois to Spend $2,000,000 on Can Plants

OWENS-Illinois Glass Company will spend about $2,000,000 in expanding its can manufacturing facilities as part of its $12,500,000 expansion program over the next several years.

Other important expenditures called for under the program are improvements and construction of glass container plants, $7,500,000; enlargement of facilities for industrial materials, such as glass blocks and glass fiber, $2,000,000; and additions for the manufacture of thin blown tumblers and stemware and other similiar glassware, $1,000,000.

Utility Credit Conferences

DISCUSSION at the public utility credit executives conferences, which are to be held at the Stevens Hotel, Chicago, June 21st to 24th, during the Credit Congress of the Industry, will be concentrated on credit subjects particularly affecting public utilities. One of them is "Merchandise Credit from a Public Utility Standpoint." Mr. R. W. Forward, Consumers Power Company, Grand Rapids, is national chairman of the utility group.

New Generators for Ford

THE Ford Motor Company is preparing to increase by 50 per cent the installed capacity in large 1200-pound-steam turbines at the River Rouge plant, at Detroit. A third 110,000-kilowatt turbine-generator unit will be added to the present power plant, making the total installed capacity 350,000 kilowatts.

The new vertical compound turbine will be a duplicate of the second 110,000-kilowatt unit, recently installed, for steam conditions of 1200 pounds, 900 F and one inch back pressure. The 1800-rpm high-pressure turbine and generator are mounted on top of the 1800-rpm double-flow low pressure unit. Hydrogen cooling is employed for the generators, to provide for increased efficiency of operation. The gen-

erators will be the 13th and 14th large turbine-driven units designed for hydrogen cooling to be built at the Schenectady Works of the General Electric Company.

Ford officials state that the increased power capacity in the Rouge plant will provide for a huge increase in Ford production.

O-B Appoints New Manager of Power Utilities Department

WADE H. Burleson, formerly assistant manager of the Power Utilities Department of the Ohio Brass Company, Mansfield, Ohio, has been appointed manager of the department, succeeding M. M. Kenneally, resigned. In his new position, Mr. Burleson will supervise the sales of all types of O-B insulators, insulator fittings and hardware, and bushings. He has had nine years of operating experience and fifteen years of service with O-B, during which he has visited almost every power utility in the United States and Canada.

Pittsburgh-Des Moines Steel Publishes New Bulletin

THE Pittsburgh-Des Moines Steel Company, 3454 Neville Island, Pittsburgh, Pa., have recently issued a new bulletin describing steel tanks for water treatment used in water filtration plants. The brochure (No. 103) contains illustrations portraying model installations of steel sedimentation basins, wash water tanks, clear wells and filters; together with tables showing the comparative and varying degree of water friction occurring in iron and cast iron pipe. Copies of this informative bulletin may be obtained from the manufacturer.

Delta-Star Equipment

THE Delta-Star Electric Company, Chicago, Illinois, are calling special attention to their self-contained unit for steel mill service which is 75 inches long and supports six (2 per phase) hollow square ventilated 6-inch copper conductors on a short 220-volt switchboard bus. The clamps have rollers permitting bus expansion without stressing the porcelain insulators.

All metal parts are nonferrous, preventing eddy current losses and heating. The interphase and end insulators are maintained in compression by means of three pipes threaded into the end plates.

Designed to resist heavy short circuit stresses, the support has insulators rated 7.5 k.v.

G-E To Build $700,000 Building in Los Angeles

ACCORDING to a recent announcement, General Electric Company will construct a new $700,000 building at Los Angeles, California.

This new building will house the offices, warehouses, and display rooms of General Electric Company, G-E Supply Corporation, G-E Contracts Corporation and G-E Merchandise Department. It is planned that it will be ready for occupancy by September.

Silex Astoria Model Has Built-in Water Heater

A COMPACT glass coffee maker, with built-in water heater, has been developed by the Silex Co., Hartford, Conn. In a space just 14 inches square is a two-unit Silex glass coffee maker, a hot water tank, and warm storage space for two additional decanters of coffee. Here, in one compact unit, is all the equipment necessary for preparing all the better tasting coffee the small restaurant or soda fountain will serve.

The water tank, made of Monel Metal, has a capacity ample for the coffee brewing output. The tank is equipped with a quick-action float control, eliminating a water gauge.

The range of the Astoria Model is chrome-plated steel. The top is finished in baked-on porcelain enamel. Both burners are combination high and low heat. As with all Silex glass coffee makers, the Astoria comes equipped with Pyrex brand glass exclusively.

New Miller Rotor Arm Lamp

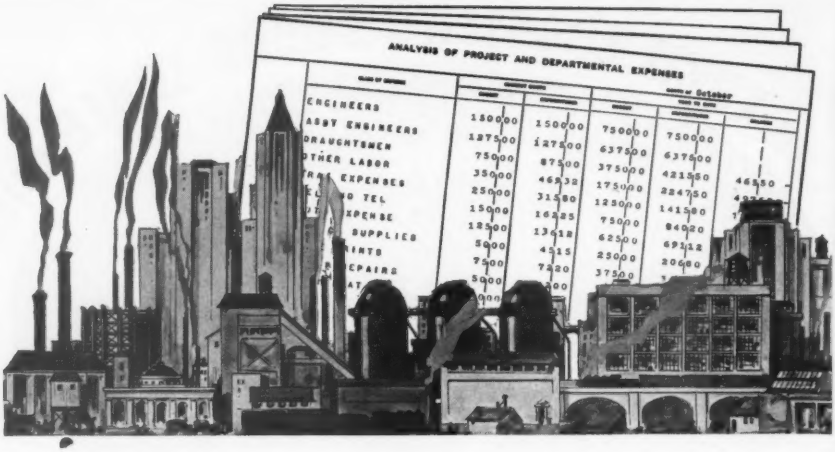
THE Miller Company, Meriden, Conn., announce an interesting, and gracefully designed desk type lamp, which has a patented rotor arm by means of which it can be turned to any angle without danger of fraying, wearing or buckling the lamp cord. It has an inner glass bowl which diffuses and reflects the light, rendering it soft and almost shadowless. It sets on a desk or table, without clamps to mar the desk, or to break the glass top. It is equally suitable for the executive desk or for use as an end table lamp, or as a bedside lamp. It gives a generous light and a wide spread of light.

New Line of Air Compressors Announced by Ingersoll-Rand

INGERSOLL-RAND Company has announced a new line of fractional horsepower air compressors. These units are made in ¼ and ½ horsepower sizes and are very compact and neat in appearance. They have automatic start and stop control, are equipped with a new style seamless steel tank, and an improved check valve.

When furnished for single phase current they are equipped with a brushless capacitor type motor and a built-in automatic protection switch giving overload and under-voltage protection. They are rated for 150 pounds per sq. in. maximum pressure, but may be set for lower pressures, or may be equipped with a reducing valve for still lower pressures.

The ¼ and ½ horsepower units are available on a 2.4 cu. ft. tank. This unit is less than 35 inches high. The ½ horsepower size is also available on a 4.6 cu. ft. tank in either vertical or horizontal mounting. If desired the units can be furnished less the tank.



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MODERN UTILITY ACCOUNTING

Control today of today's expenses is essential to the success of every utility company. Information must be both accurate and immediately available. In meeting today's demands for greater dependability and speed, the International Electric Accounting Method is proving ideal for all phases of public utility accounting work.

With International Electric Bookkeeping and Accounting Machines, entries are made as the transactions occur. These entries are classified and reclassified mechanically, as often as necessary. No additional manual handling, posting or writing are required.

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PRINCIPAL CITIES OF THE WORLD

A Load Builder That Will Make Friends For You

• THE BIPOST

(1000 WATT T-24)
TOTALLY INDIRECT

LUMINAIRE

HERE is a new, small diameter, permaflector equipped luminaire, developed by "Pittsburgh" engineers to provide high intensity indirect lighting for rooms where ceilings are low or where larger units are impractical.

It is modern and distinctive in appearance and scientifically designed to control 1000 watts of light in the most efficient and satisfactory manner.

Its shallow bowl—a type much in vogue today—serves only as an ornamental enclosure for the Permaflector of smooth glass which controls the light.

The fixture is equipped with a unique dual husk, concealing the socket and lamp neck, ingeniously ventilated. No exposed vents mar its design.

Stranded nickel wire with 40 mil. wall of asbestos insulation is used in this fixture, additionally insulated at the socket by refractory tubing.

Many of your customers are prospects for luminaires of this type and you can unhesitatingly recommend this unit which is backed by more than 21 years of successful lighting experience.

Write for details.

SPECIFICATIONS

Standard Lamps, Size	*1000 Watt T-24 Bipost*
Luminaire No. (Available with stem-hanger only)	A-581
Diameter of Bowl	21"
Standard Suspension:	
Top of Bowl to Ceiling	36"
Overall Length	43"
Permaflector No.	B-507
*Standard Finish	Roman Silver
Shipping Weight (One Luminaire Packed)	23 lbs.
Code	AFIAWON
Price each F.O.B. Irwin, Pa.	$23.00

**On special order may be had finished in sprayed and baked ivory, seafoam green, azure blue or dove gray (husk finished in polished aluminum) at a small additional charge.*

On special order may be had finished in Lustroloe gun metal, antique bronze or light bronze (husk finished in polished aluminum) at no additional charge.

"Pittsburgh" Permaflector

PITTSBURGH REFLECTOR COMPANY

OLIVER BUILDING PITTSBURGH, PA.

Whether You Buy A Tankful Of Gasolene Or A Carload Of Oil—You Can Be Sure That CITIES SERVICE PRODUCTS *Are Unsurpassed!*

THE QUALITY of Cities Service gasolenes, oils and greases is guarded every step of the way from the oil well to you. For Cities Service is a completely integrated unit in the oil industry, engaged in all phases of petroleum operation . . . production, transportation and refining. The finished products, backed by 74 years of refining experience, reach you through 15,000 reliable outlets. The Cities Service emblem is your guarantee of dependable products and efficient, courteous service.

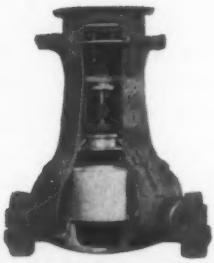
CITIES SERVICE  ***Serves A Nation!***

"Follow the Leader"

While small boys have grown to men . . . this Company has consistently been the leader in every worthwhile improvement in the design and construction of all types of water meters.

And how Water Works men "follow the leader" . . . over six million Trident and Lambert Water Meters made and sold the world over!

Neptune Meter Company (Thomson Meter Corp.), 50 West 50th St. (Rockefeller Center) New York City . . . also . . . Neptune Meters, Ltd., 345 Sorauren Ave., Toronto, Canada . . . A meter for every type of service.



Follow this lead . . . see these modern interchangeable parts inserted into the casing of a typical Trident Water Meter that was a leader back in 1899 . . . Trident and Lambert Water Meters are now and always have been leaders in the principle of interchangeability.

TRIDENT
and LAMBERT
WATER METERS

A one "package" outfit with a multiple of uses . . .

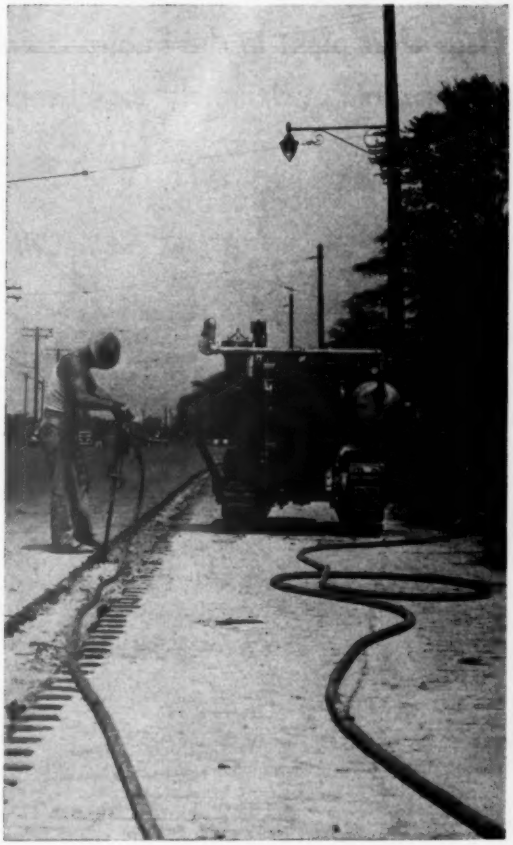
With compressor in the rear, operated off the power shaft, this Cletrac supplies air for the power hammer.

With bulldozer in front, it quickly backfills the ditches.

In between times, it moves heavy materials—a Jack of many trades and master of them all.

Matching the Cletrac in sound engineering and sturdy construction is a complete line of working equipment — bulldozers, scrapers, air compressors, welders, post hole augers, rock crushers, front end loaders, winches, booms.

There's a Cletrac for every job—fifteen models from 22 to 94 horsepower, either gas, tractor fuel, or Diesel powered. Investigate.



THE CLEVELAND TRACTOR COMPANY · CLEVELAND, OHIO

Cletrac
Crawler Tractors

The only tractors with controlled differential steering that keeps both tracks pulling at all times . . . on the turn as well as on the straightaway.

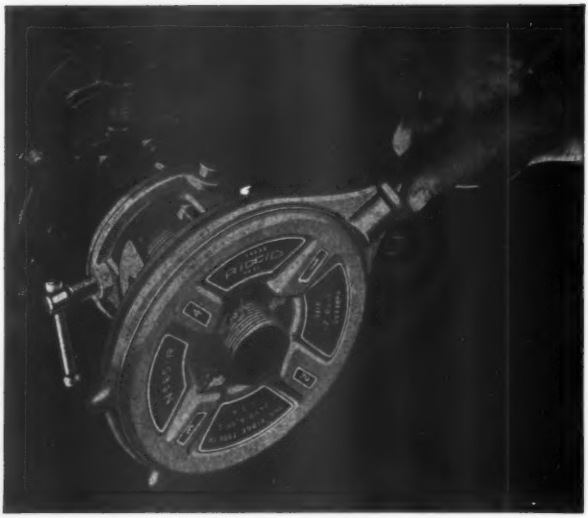
INDEX TO ADVERTISERS

(Concluded on Page 80)

INDEX TO ADVERTISERS (Concluded)

PROFESSIONAL DIRECTORY

• This page is reserved for engineers and engineering concerns especially equipped by experience and trained personnel to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, design and construction. « «



1 SET OF DIES

threads 4 sizes of pipe

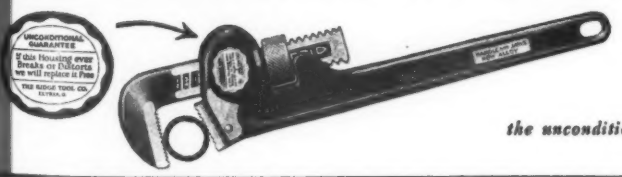
Instead of 16 separate dies usually needed to thread 1", 1¼", 1½" and 2" pipe, this RIDGID No. 65R threader threads them all perfectly with one set of 4 dies, that stay in the threaders, can't get lost.

Move the change plate to the size of pipe and the threader is ready for work. Even the new style workholder sets to size with a twist of a gauge ring—put it on the pipe and tighten with one screw.

You'll like these and other features of this remarkable tool. Ask your Jobber to show you a RIDGID No. 65R.

THE RIDGE TOOL CO., ELYRIA, OHIO, U. S. A.

A RIDGID PIPE TOOL



75% of your wrench repairs are stopped when you use RIDGIDs *with the unconditionally guaranteed housing.*

Eyes that "See Through" Steel

TAKE A SPECIMEN of any metal . . . vaporize it in an electric arc . . . and the result is something like a rainbow: the *spectrum* of that metal.

In this picture, a Plymouth metallurgist is studying the photograph of such a spectrum. This is how he is able to "see through" steel.

For metal analysis, this spectroscopic method is the most exact known. It reveals impurities . . . alloys used for special qualities . . . *everything* in a metal.

Other tests help develop new and better metals. And what is more, they prove that the finished "parts" will stand up—*before* they go into Plymouth cars.

From this research came Plymouth's special brake-drum metals, which give *longer brake life* . . . anodic-surfaced aluminum alloy pistons which increase power . . . soft-acting Amola steel springs.

And, too, for Plymouth's amazing ability to *stand up*, you can largely thank all these "eyes that see through metals."

PLYMOUTH DIVISION OF CHRYSLER CORPORATION, Detroit, Michigan.

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PLYMOUTH BUILDS GREAT CARS